

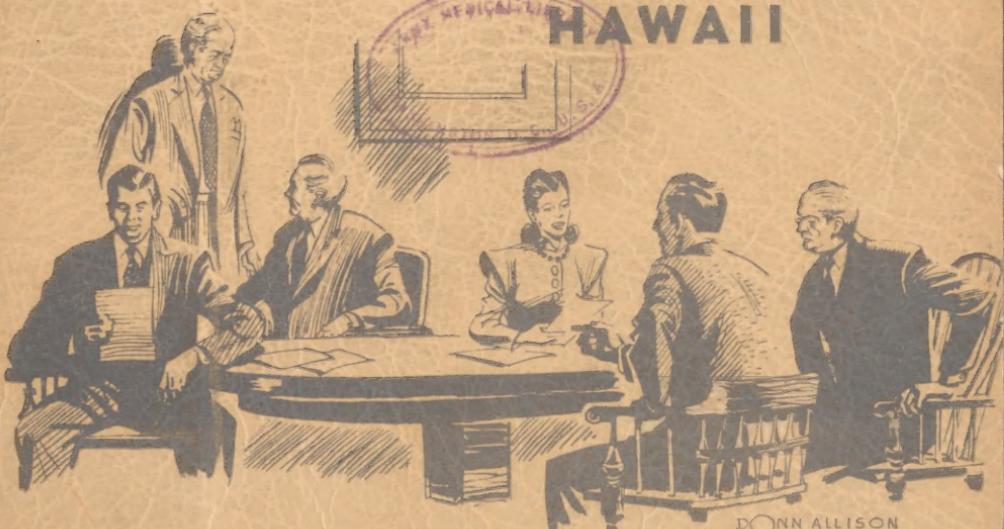
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# PLANNING

FOR HEALTH  
IN POSTWAR

HAWAII



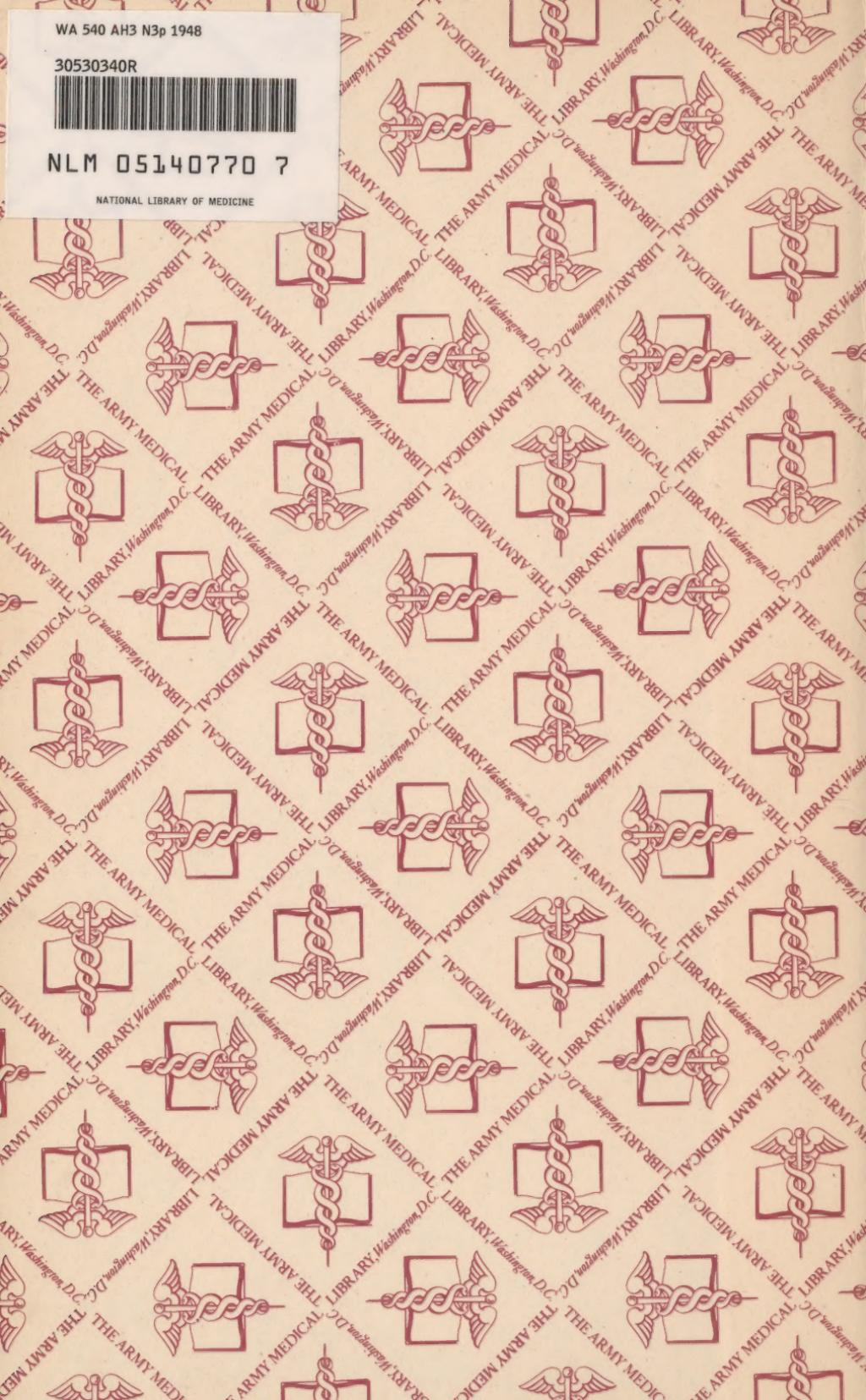
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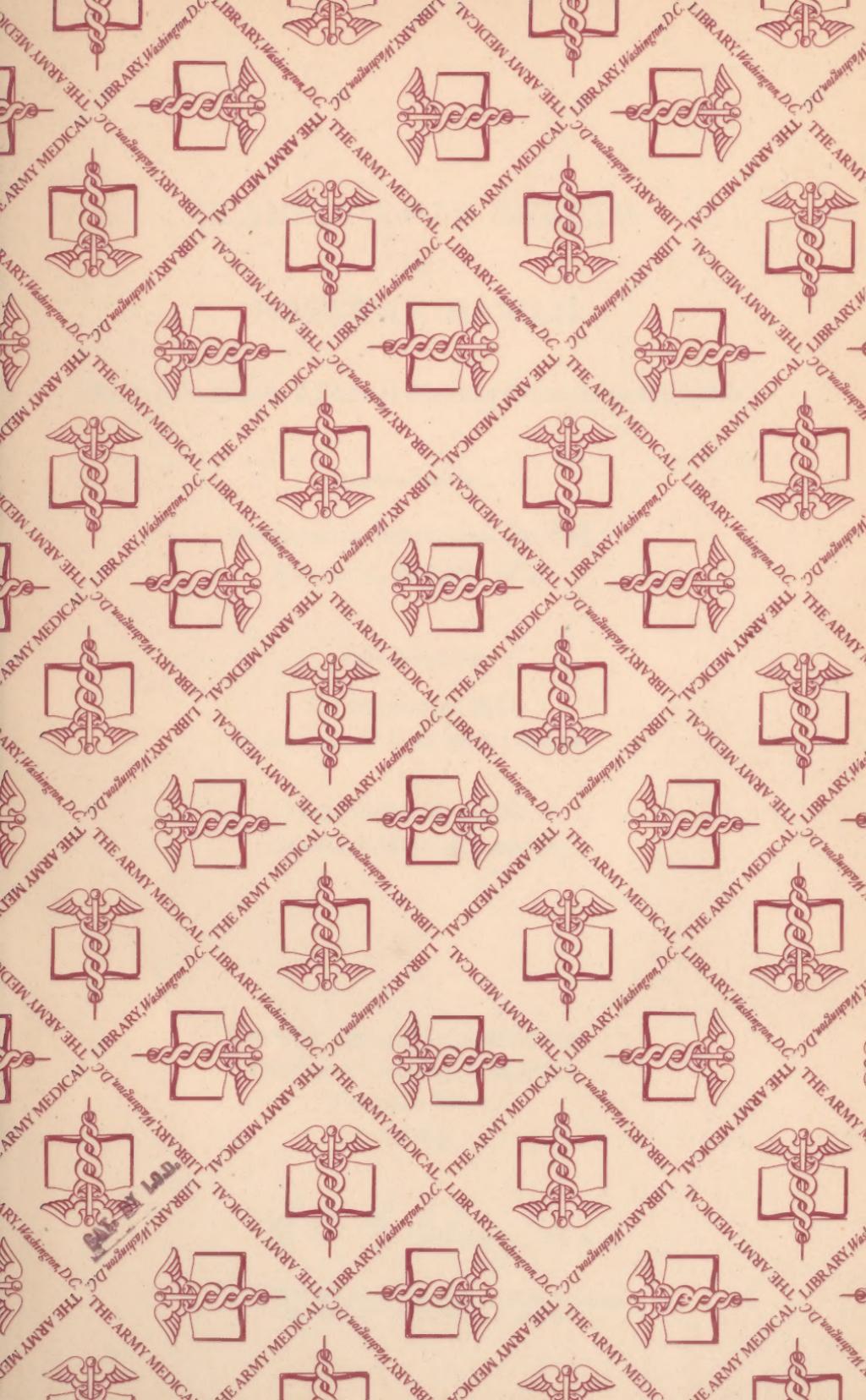
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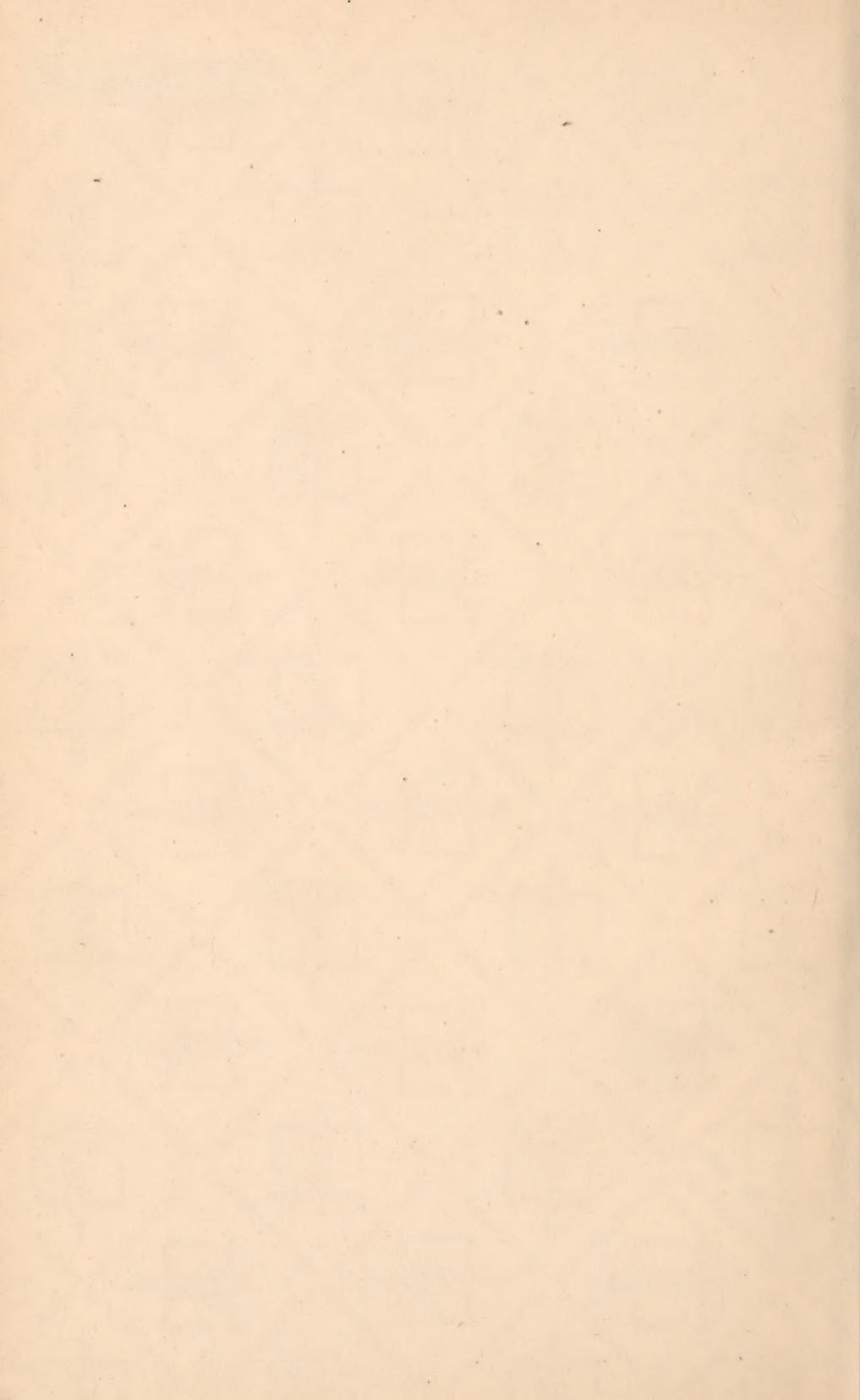


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PLANNING FOR HEALTH  
in  
POSTWAR HAWAII

Recommendations of Postwar Planning Committees on Health

summarized by

RAYMOND G. NEBELUNG, DR. P.H.  
ROBERT C. SCHMITT, M.A.

with a foreword by

F. J. PINKERTON, M.D.  
Former Chairman, Public Health Committee  
and  
LYLE G. PHILLIPS, M.D.  
Chairman, Public Health Committee

PUBLIC HEALTH COMMITTEE  
Chamber of Commerce of Honolulu  
Honolulu, Hawaii

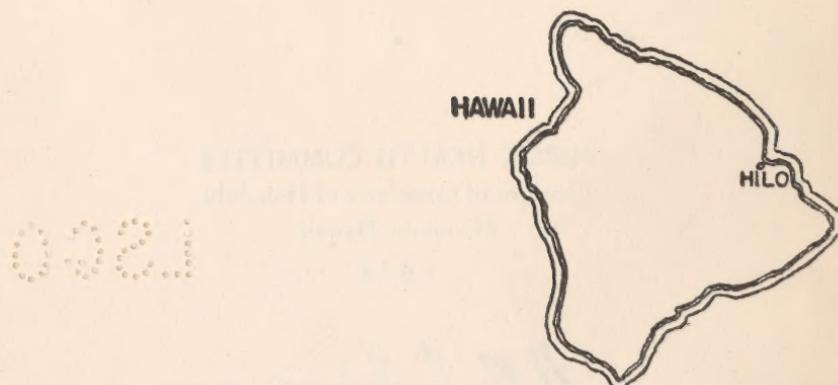
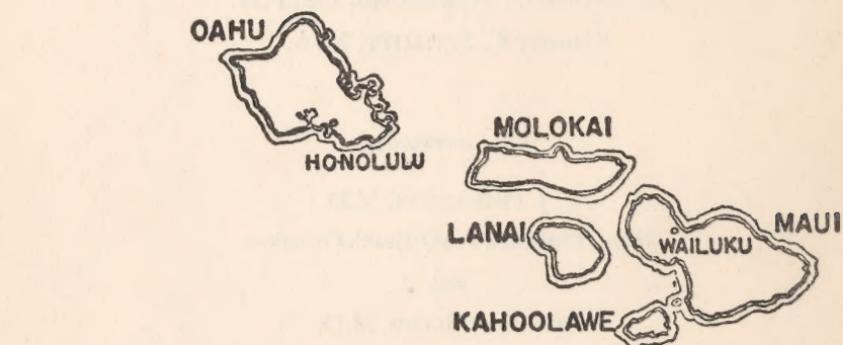
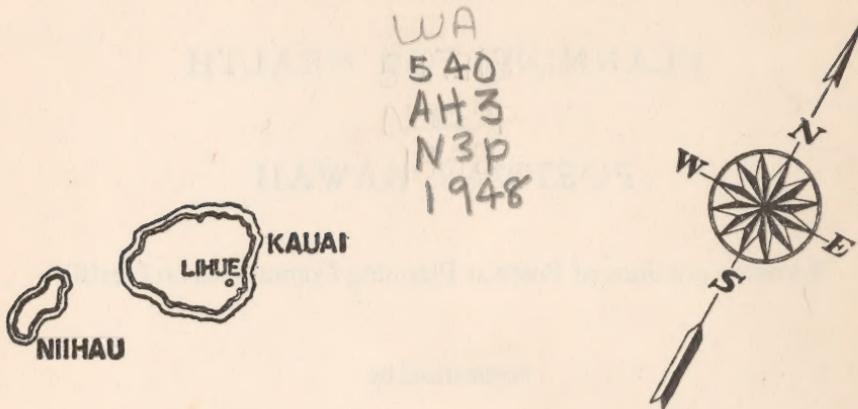
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1948

*R. G. Nebelung, DR. P. H.*

EXECUTIVE DIRECTOR, PUBLIC HEALTH FUND  
CHAMBER OF COMMERCE OF HONOLULU

MAP OF HAWAIIAN ISLANDS



1 inch equals approximately 60 statute miles

## FOREWORD

We believe the work of the Postwar Planning Committees on Health to be unique among American communities. A multitude of agencies and individuals pooled their talents, time and energies to make reports on all aspects of Honolulu's health. Their recommendations covered not only most phases of the local health and welfare picture, but applied frequently to the outlying islands as well as to Oahu.

It is safe to say that Hawaii's health will advance in the same degree that these recommendations are acted upon. This fact is established by the success of the steps already taken as a result of the reports. Other recommendations should be put into action at the first opportunity. Although suggestions outlined in the studies generally apply to single agencies and individuals, the role of the public—of interested lay and professional persons—is vital to eventual attainment of these goals.

The Public Health Committee is proud to have shared, with many other agencies, in the completion of the postwar studies. It is confident that the people of Hawaii will likewise recognize their merits, and that the future will witness significant progress, through such studies, in the promotion and maintenance of a high standard of health in Hawaii.

F. J. PINKERTON, M.D., *Chairman*,  
Public Health Committee, 1937-47  
LYLE G. PHILLIPS, M.D., *Chairman*,  
Public Health Committee, 1948

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## ACKNOWLEDGMENTS

The scope and all-inclusive nature of the Postwar Planning Health Studies made the assistance of many persons in diverse areas of endeavor absolutely essential. Although the number of persons generously lending their time and effort toward the completion of the studies precludes individual mention, several of the most helpful are listed below.

The work of the Steering Committee cannot be overestimated. This group consisted of Charles L. Wilbar, Jr., M.D., president of the Territorial Board of Health, chairman; Nils P. Larsen, M.D., practicing physician, associated with the Hawaiian Sugar Planters' Association; Dr. Raymond G. Nebelung, executive director of the Public Health Committee of the Chamber of Commerce of Honolulu; and Miss Vivian Johnson, director of the Child and Family Service of Honolulu. Special recognition is likewise due Mr. Frank E. Midkiff of the Chamber of Commerce for his contributions in these studies. The Public Health Committee of the Chamber of Commerce of Honolulu, as sponsor of the studies, gave full support to the recommendations. This project was inaugurated and largely completed while F. J. Pinkerton, M.D., served as chairman of the committee.

Many individual persons and official voluntary agencies contributed to the success of the studies. Especially worthy of mention are the Territorial Department of Health, the Department of Public Instruction, the University of Hawaii, the Library of Hawaii, Mabel Smyth Medical Library, the hospitals, the Honolulu Council of Social Agencies and its member groups, and other federal, territorial, city and county and voluntary agencies too numerous to mention. Equally prominent roles in the successful conduct of these studies were played by physicians, dentists, nurses, educators, and workers in the social sciences, all of whom contributed time and talent to the project.

R. G. NEBELUNG, DR. P.H.  
Executive Director  
Public Health Committee

## GEOGRAPHICAL NOTE

The Territory of Hawaii consists of eight major islands and a number of lesser ones.<sup>1</sup> The two largest cities are Honolulu, on Oahu, and Hilo, on Hawaii. There are five counties, but Kalawao (consisting of Kalaupapa Leper Settlement, on the Island of Molokai) is classified with Maui County for administrative purposes. These geographical units and their largest cities are listed in the following table:<sup>2</sup>

COUNTY, ISLAND OR CITY	Area in square miles, 1940	TOTAL POPULATION		
		April 1, 1940		July 1, 1947
		Per square mile	Total	
Honolulu County <sup>3</sup> . . . . .	603	428.3	258,256	360,274
Oahu Island . . . . .	589	437.5	257,664	360,274 <sup>4</sup>
Honolulu city <sup>5</sup> . . . . .	N.A.	....	179,326	268,913 <sup>4</sup>
Rural Oahu . . . . .	N.A.	....	78,338	91,361
Palmyra Island . . . . .	N.A.	....	32	4
Midway Island <sup>3</sup> . . . . .	2	....	437	4
Other outlying islands <sup>3</sup> . . . . .	12	....	123	4
Hawaii County <sup>5</sup> . . . . .	4021	18.2	73,276	73,690
Hilo . . . . .	N.A.	....	23,353	29,111
Rural Hawaii . . . . .	N.A.	....	49,923	44,579
Maui County <sup>6</sup> . . . . .	1173	47.7	55,980	56,319
Maui Island . . . . .	728	64.4	46,919	47,020
Wailuku city . . . . .	N.A.	....	7,319	N.A.
Lahaina city . . . . .	N.A.	....	5,217	N.A.
Molokai Island . . . . .	259	20.6	5,340	5,443
Hoolehua village . . . . .	N.A.	....	1,050	N.A.
Kalawao district <sup>6</sup> . . . . .	14	31.9	446	415
Lanai Island . . . . .	141	26.4	3,720	3,441
Lanai City . . . . .	N.A.	....	3,597	N.A.
Kahoolawe Island . . . . .	45	....	1	0
Kauai County . . . . .	623	57.5	35,818	35,194
Kauai Island . . . . .	551	64.7	35,636	35,396
Lihue town . . . . .	N.A.	N.A.	4,254	N.A.
Niihau Island . . . . .	72	2.5	182	213
Totals . . . . .	6240	65.9	423,330	525,477

<sup>1</sup>The eight large islands include Hawaii, Maui, Oahu, Kauai, Molokai, Lanai, Niihau and Kahoolawe, in that order. The smaller islands include: Kaula, Nihoa, Necker, French Frigate Shoal, La Perouse Pinnacle, Gardner Pinnacles, Maro Reef, Laysan, Lisianski, Pearl and Hermes Reef, Midway and Kure (Ocean), all of which extend, in the order given, to the northwest of the major islands; Molokini, Mokolii, Kapapa, Mokulua, Rabbit, Mokuhoniki and others, all of which lie within several miles of the beaches of the larger islands; and Palmyra Island and Kingman Reef, isolated islands far to the south, which, although not geologically part of the Hawaiian Archipelago, are administered by the Territory of Hawaii.

<sup>2</sup>Land area and 1940 population and density from 16th Census of the United States, *Population, First Series, Number of Inhabitants, Hawaii*, Tables 3 and 4. Data for 1947 from Territorial Department of Health, quoted in *Hawaii Facts and Figures, 1946-1947* (Chamber of Commerce of Honolulu, May 1948, p. 12).

<sup>3</sup>Honolulu County refers to the entire City and County of Honolulu, including (for statistical purposes) Midway and other outlying islands. Honolulu city refers to that part of the City and County statistically defined as the City of Honolulu.

<sup>4</sup>No separate estimate made for Palmyra, Midway and the other outlying islands, which were included with Honolulu city and the Island of Oahu.

<sup>5</sup>Same as the Island of Hawaii.

<sup>6</sup>Kalawao County included with Maui County.

N.A. — not available.

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## PLANNING FOR HEALTH IN POSTWAR HAWAII

Recommendations of the Postwar Planning Committees on Health,  
Chamber of Commerce of Honolulu

### BACKGROUND OF THE POSTWAR STUDIES

This is a summary of the Postwar Planning Studies in Health. In compact form, it presents the major recommendations made by the groups who did the studies. It also gives the answers to questions regarding the reasons behind the studies—why they were made, who made them, how they were presented, and their use in the foreseeable future.

#### The Problem

Why were the postwar planning studies in health begun?

The answer is implicit in the title of the committee in charge of the project. The need for these studies grew out of the geographical and historical events culminating in VJ Day. Problems of public health, many of considerable magnitude, were facing the Hawaiian Islands in general, and Honolulu in particular. Their solution became imperative by the end of the Second World War, and hence they were "postwar problems."

Many of Hawaii's health problems had a long history antedating Pearl Harbor by several decades, while others were a direct outgrowth of the war. As one of America's last frontiers, the Islands have been susceptible to those difficulties most likely to confront a young, expanding area. Health facilities and personnel, like those in certain other fields, have not always kept pace with the rapid growth of the community. The semi-tropical setting of the territory, totally dissimilar to conditions in the major portion of the United States, has resulted in certain specialized problems of public health. These problems were not new to the territory. Other effects stemmed from the great influx of population during the war years—from the crowded living conditions, high mobility, and frequent social disorganization that are often factors in the incidence of mental and physical disease.

These problems came to the forefront at the end of World War II. Honolulu, more severely affected by the war than most American cities, faced perhaps even greater dislocations in the early days of peace. Conditions, strained to the breaking point, demanded immediate attention. New problems were likely to arise. Now, fortunately, attention could finally be diverted from winning the war. It was possible at last to focus on matters relating strictly to community health. Postwar planning for the Honolulu area was essential.

#### The Committees

With considerable foresight, the Chamber of Commerce of Honolulu had already made steps to meet the problem of postwar planning. As early as August 1944, a full year before the end of the war, the Chamber had appointed seventeen committees and a number of subcommittees to pave the way for post-war health planning.

These groups were vested with an important and comprehensive task: to review and outline health problems, community resources and services as they existed, and, on the basis of the findings, to make recommendations for the expansion and extension of community health services and programs.

The scope of these studies demanded committee members well versed in matters pertaining to local health. The membership, while predominantly chosen from medicine and public health, also included many other professional and business persons. Space does not permit the listing of individual qualifications, but it is safe to say that a high level of ability, background and experience was achieved in the selection of these members. The work of these committees was augmented by the services of the professional staff of the Public Health Committee of the Chamber.

A study and planning program of these broad dimensions threatened to become unwieldy unless proper organizational measures were taken at the outset. Subcommittees were responsible to the committees of which they were a part. A steering group in turn guided the work of the various committees. Such a plan of organization assured an efficient, democratic, capable and responsible process of study.

The Steering Committee met regularly each week to review progress reports of the various committees and subcommittees. Suggestions were made to the liaison representative in order to facilitate and guide the studies. A mimeographed form assured uniformity in the outline progress reports. The liaison representative assisted the chairman in preparing the agenda for all meetings.

Individual committee and subcommittee chairmen met with members of their respective groups. The liaison representative of the Steering Committee and the executive director of the Public Health Committee of the Chamber of Commerce served as ex officio members of all study committees.

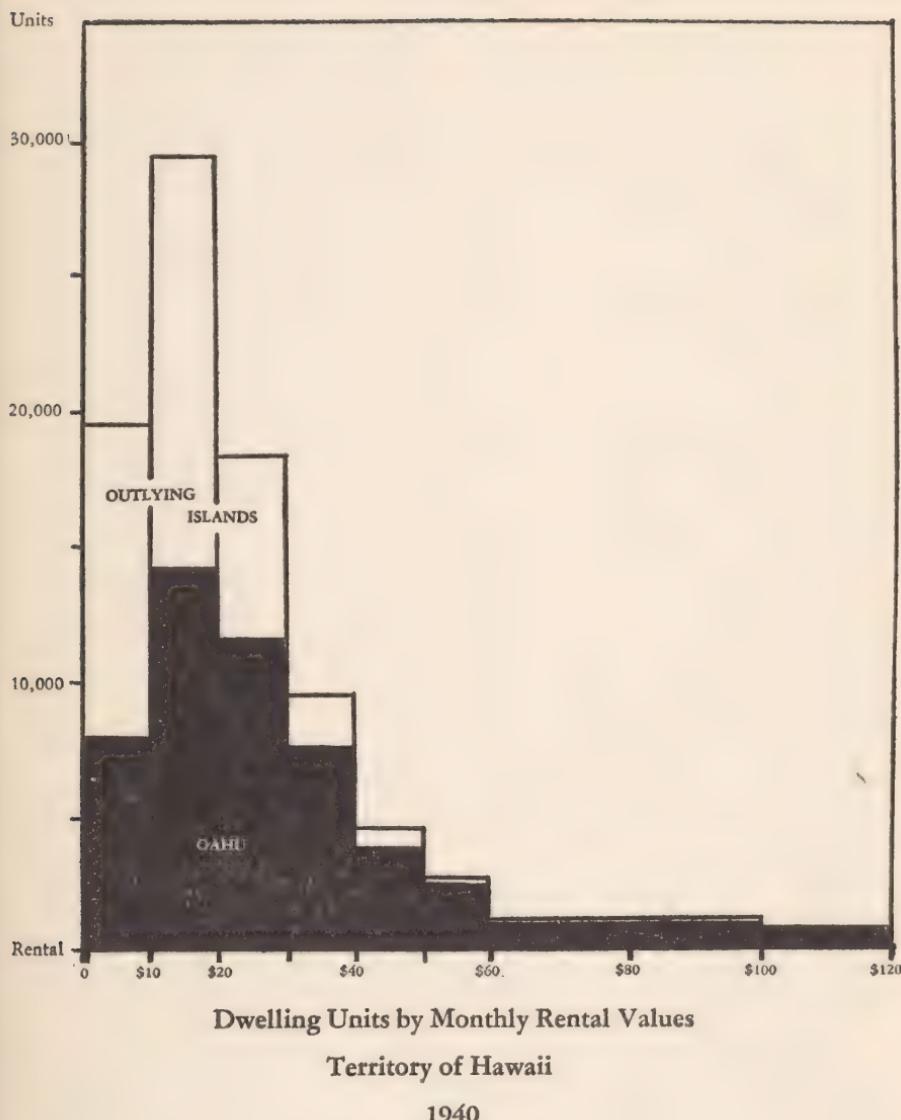
### The Final Reports

These studies were published in eight separate volumes, issued between February 1946 and January 1948. They were edited and put in final form by the professional staff of the Public Health Committee.

These eight volumes provide a flexible blueprint for years to come. Like the Chamber's two previous surveys, the Hiscock reports of 1929 and 1935,<sup>1</sup> the recommendations cover a great variety of official and voluntary agencies. It is these groups, as well as an enlightened public, who share the responsibility for carrying out the recommendations. Past actions of such groups as the Oahu Health Council and Public Health Committee augur well for the ultimate success of the postwar studies.

The recommendations contained in these reports are listed below. In several cases reorganization and bringing up to date have been necessary, especially where the original recommendations were quantitative in nature. Footnotes indicate suggestions already followed. Additional data, notably regarding the historical background and present situation on which these recommendations were based, can be found by reference to the complete reports.

<sup>1</sup>Ira V. Hiscock, *A Survey of Health and Welfare Activities in Honolulu, Hawaii* (1929) and *A Survey of Public Health Activities in Honolulu, Hawaii* (1935).



Source: 1940 U. S. Census, Housing, Hawaii.

## HOUSING

The Second World War aggravated a housing situation that responsible persons in the territory had considered bad even before Pearl Harbor. The early, rapid, unplanned growth of Honolulu and some other island areas had resulted in wide variations in quality of housing. Then the war brought thousands of workers and servicemen to the Islands, and the situation became even more difficult. By war's end it had become apparent that vigorous measures were necessary not only to remedy the present situation but to prevent its recurrence.

Quite logically, the housing problem was taken as part of their province by the Postwar Planning Committees on Health. Such a step implied full recognition of the role of housing in community health, both mental and physical. A significant correlation between housing and morbidity and mortality rates has often been noted. Likewise, studies indicate the influence of neighborhood on mental disease. "Social pathology"—divorce, delinquency and similar evidences of social breakdown—is also closely tied to such factors as rentals or persons per room. The resulting report, while essentially a study in health, bears witness to the contributions of sociologists, economists, the construction industry, real estate interests and city planners, as well as of persons in the fields of medicine and public health.

The major emphasis was on the long-term needs of the territory. Emergency measures, it was true, were imperative to remedy the serious shortage of accommodations existing at the time. These, however, were the responsibility of other agencies, whose powers and character enabled them to take immediate steps in correcting short-term problems. The committee concentrated on a healthful housing program which would cover a number of years.

The complete analysis appears in the volume *Healthful Housing for the Territory of Hawaii*, published in February 1946. The reader is referred to that work for additional information. The recommendations of the committee are summarized below.

### LEGAL ASPECTS

#### Recommendations for Immediate Action

1. Clarification is needed as to which agency will exercise authority over the development of a possible Urban Redevelopment Program in the islands.

2. It is suggested that legislation should be drafted either broadening the powers of an existing agency, or, preferably, creating a new body similar to the former Government Research Bureau, which would collaborate with present specific official departments having authority over definite portions of housing control and

- a) Revise the City and County Building Code in line with the portion of the Uniform Building Code as may apply to local conditions.
- b) Recommend the application of such portions of the revised Building Code to the other counties of the territory as may be pertinent to the circumstances involved.

- c) Revise the Territory Sanitary Code to bring it in line with rapidly changing conditions and growth of the territory.
- d) Coordinate the Revised Sanitary Code to supplement, in so far as practicable, the Revised Building Code.
- e) Develop an adequate housing code which would be applicable to the needs of the territory.

3. Modernization of regulations and codes of the City and County Building Department is needed. This would broaden the scope of their controls.

4. The provision of a central agency of government to collaborate with existing agencies in the development of codes and regulations should eliminate misunderstandings due to obsolete codes.

5. The responsibility for the development of estimates as to the extent of legislation, if any, required for an adequate Urban Redevelopment Program, the personnel that would be needed to administer it, and the overall cost should be assigned to one or more specific agencies. If this is not done, the chance of overlapping authority will exist.

6. The political, civic and business organizations on Maui and Kauai should be encouraged to examine the overall benefits that could be gained by the adoption of controls intended to allow the fabrication of only acceptable forms of housing, the proper use of land and similar matters, as for example, the examination of plans by the Department of Health, and give to the attainment of these functions such active and continued support as may be justified.

### **Long-Range Objectives**

7. At present, sufficient information is not at hand to make definite recommendations as to the full extent of legislation needed for an adequate Urban Redevelopment Program. The basic provisions, however, should cover eminent domain, a land acquisition agency, land disposal, preparation of a comprehensive general plan, inter-governmental cooperation, redevelopment agencies, public controls, financing of redevelopment, acquisition of land for future development, tax abatement, limitation of dividends, and rehousing of displaced tenants.

8. Authority for the development of an Urban Redevelopment Program might be vested in the Hawaii Housing Authority, the City and County Planning Commission, or some newly created agency. (The Hawaii Housing Authority and the City Planning Commission are studying jointly the legal problems which might arise in the development of an Urban Redevelopment Program.)

9. There appears to be a need for a code which would prevent the overcrowding of inhabited buildings by persons living therein. At present the basis of design of new buildings can be taken care of in existing codes, but the responsibility for the maintenance of such limits after construction should be more definitely fixed.

10. The responsibility for the prevention of overcrowded conditions of homes or buildings is placed in the Department of Public Welfare in some places and in the Department of Health in others. The extent and type of control needed locally would depend upon the magnitude of the local problem and the income groups involved. This could best be ascertained by a survey as suggested.

11. Where modernization of codes and regulations is necessary, the strengthening of the codes and regulations without the provision of sufficient personnel to oversee them is not practical.

## PERSONNEL<sup>1</sup>

12. Twenty-one qualified inspectors are needed presently in the Department of Health. These would be assigned as follows: Oahu, 19; Hawaii, 1; Maui, 1. The cost per year would be approximately \$67,357.00. It is recommended that the money needed for these positions be provided from any presently available source and that the continuance of these positions be provided for at the next session of the legislature.

13. In making such surveys as will be needed to understand adequately the postwar problems, additional personnel must be temporarily added to the staff of the Hawaii Housing Authority.

14. Two qualified workers are needed for the City and County of Honolulu Planning Commission to make land use studies and to prepare maps and charts. Annual added cost would be \$8,977.00.

15. Adequate staff to cope with problems as they exist in Honolulu should be provided the Building Department, such as two qualified building inspectors to examine structures in the course of fabrication. Annual added cost would be \$8,977.00.

16. The County of Hawaii should provide at least one engineer, an assistant and an office worker for the County Planning Commission to develop an adequate program.<sup>2</sup>

## SURVEYS

### Recommendations for Immediate Action

17. Housing Survey of Honolulu. The scantiness of factual data regarding housing conditions presently existing in Honolulu has been in a good measure responsible for lack of concerted action by the various local official agencies. Without such data, understanding of the total housing problem is not possible. It is recommended that a comprehensive survey of selected districts of Honolulu be made, using forms that the existing agencies have approved. In this manner information of real value will be forthcoming. It could be made, among other things, to provide data which would enable them to:

- a) Decide on the most applicable type of control measure in regard to existing substandard housing structure; *i.e.*, law enforcement, demolition, rehousing, ultimate conversion from residence to other uses and the like.
- b) Determine the extent of need for a program to fit the substandard wage-earning family groups to homes and thus prevent overcrowding.

<sup>1</sup>All personnel recommendations were for immediate action.

<sup>2</sup>Only the assistant remains to be obtained. He should be an engineering draftsman.

- c) Ascertain what may need accenting in regard to home accident prevention from the standpoint of design, remodeling, illumination and the like. The information compiled could be used to develop participation on the part of private architects, builders, engineers, mortgage companies, and others in a program to prevent repetition of such improper allowances as may have been found.
- d) Obtain data which would be most helpful in developing adequate sanitary, housing, plumbing, building, safety and similar codes.

A survey of this nature would require the services of qualified persons. This would require about \$25,000 from some outside source. Each benefiting agency also would contribute to the extent its facilities allow.

18. More intensive land use and occupancy studies should be made by the City Planning Commission.

### **Long-Range Objectives**

19. The type and extent of new programs that should be undertaken would depend on the findings of surveys as suggested.

20. It is recommended that the proposed housing survey be considered an item of sufficient immediate public health value to be eligible for support by the Chamber of Commerce of Honolulu health funds or other monies that might be made available at this time for this purpose. The survey form and the method of evaluating existing conditions should be approved by the several interested agencies. The persons employed to make the survey would be under the guidance of the housing engineer of the Department of Health. This procedure would eliminate the need of each agency conducting its own, and often overlapping, survey.

## **SPECIAL PROBLEMS**

### **Recommendation for Immediate Action**

21. All the government agencies mentioned agree that there is a need for a comprehensive program which would make available on the public market adequate amounts of land acceptable as homesites. Therefore, we suggest this problem be referred to the Chamber of Commerce Real Estate Committee for recommendations regarding an applicable method to accomplish this purpose. These recommendations should then be referred back to the Public Health Committee so that coordinated action and support may result.

### **Long-Range Objectives**

22. All agencies have expressed the desire to act together in so far as it may be practicable to do so. However, as long as the degree of insufficiency in a given direction is not conclusively established, marked differences of opinion are inevitable. Such lack of mutual understanding can impede greatly either improvements or control of environmental conditions in the territory.

23. The need of planning is especially evident in Hilo, which city should be given emphasis in any future programs.

## PUBLIC HEALTH ADMINISTRATION AND ORGANIZATION FOR THE TERRITORIAL DEPARTMENT OF HEALTH

In Hawaii, as in other parts of the world, organized facilities and services designed to prevent and mitigate illness have had for the most part an irregular rate of growth. The result has been gaps in health programs and a decidedly cumbersome supervisory machinery for both old and new services. When the United States first annexed these islands, their population was less than 150,000 persons, and public health was in a relatively primitive stage of its history. Subsequent changes in the social and economic condition of the territory have added greatly to the duties of the Department of Health, making mandatory a reorganization of its administrative machinery and development of new programs based upon today's community needs.

Four subcommittees attacked the problem. One, consisting of four members, studied laws and regulations. A second, with five members, analyzed organization and operating policies of the territorial and official county health agencies. The six members of the subcommittee on inter-agency relationships made an additional contribution. The remaining group assigned its four members to a study of personnel and fiscal policies and practices. Thus a representative group of qualified persons covered each important phase of the problem.

The final report of the Committee presents a comprehensive but flexible study of the field, with proper provision not only for bringing the Territorial Department of Health up-to-date, but for making allowance for all foreseeable future developments. The report brings into sharp focus measures clearly indicated to insure more economical and efficient operation of this agency. The committee, in making its recommendations, tried to keep in mind the need for developing a simplified and orderly arrangement of duties and functions.

The original study, to which the reader is referred for additional information, was published in May 1946 under the title *Public Health Administration and Organization for the Territorial Board of Health*.

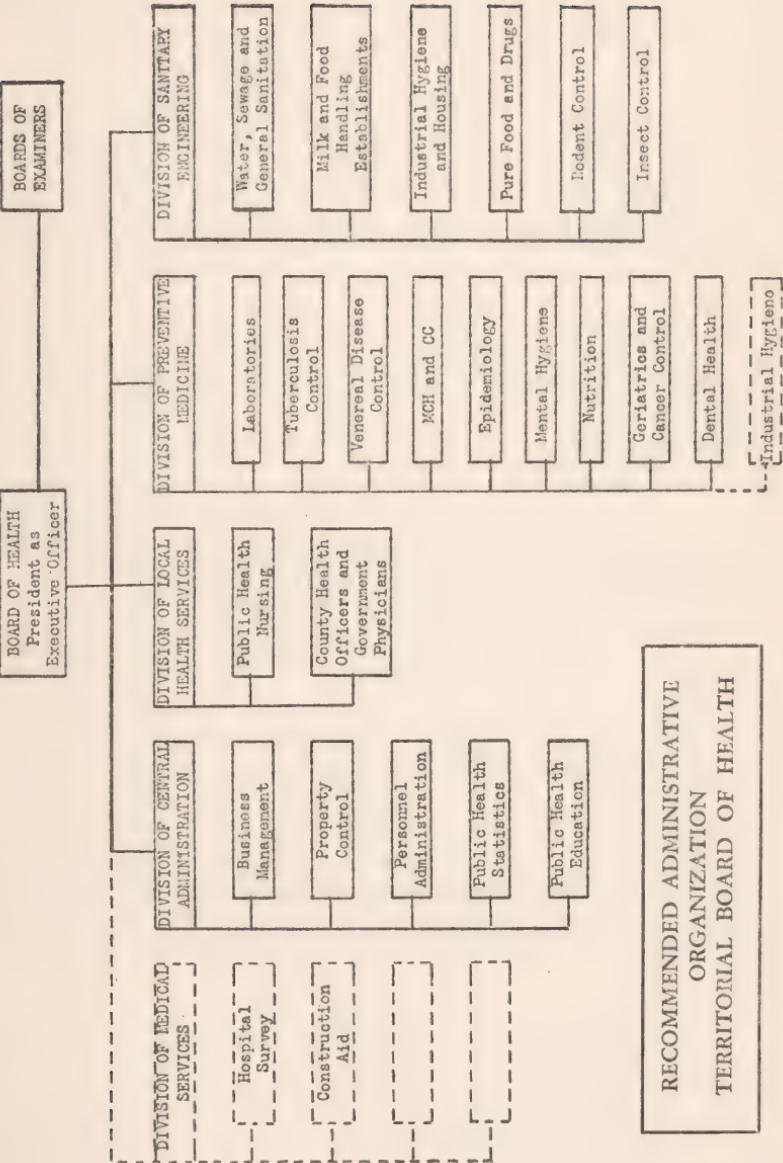
### LEGAL ASPECTS<sup>1</sup>

1. Sec. 2011 (R.L.H. 1945), defining powers and duties of Department of Health personnel, should be amended to require the President of the Board of Health to be a licensed physician of the territory and to have other appropriate and specific qualifications for public health administration.
2. Title 6 (specifying membership requirements, powers and duties of the department) of the Revised Laws of Hawaii 1945, as amended, should be entirely rewritten, deleting all obsolete or excessively detailed provisions. Title 6 should state in general terms the authority and power of the Department of Health, authorizing it to make all proper regulations, orders, directives, and li-

<sup>1</sup>The original study confined its recommendations to those for immediate action. No long-range plans were listed.

GOVERNOR

BOARD OF HEALTH  
President as  
Executive Officer



RECOMMENDED ADMINISTRATIVE  
ORGANIZATION  
TERRITORIAL BOARD OF HEALTH

cense and permit requirements necessary or desirable for the public health, and all proper regulations necessary or desirable for the organization and work of its staff. The present defect in the law should be rectified, which limits the Department of Health's regulation-making power under section 2015, R.L.H. 1945, as amended, to specifically named subjects, because too many subjects worthy of regulation fall in the gaps between the named subjects.

## CHANGES IN ORGANIZATION

3. There should be a Division of Preventive Medicine under the direction of its director and including the following bureaus: laboratories, tuberculosis control, venereal disease control, maternal and child health and crippled children, epidemiology, mental hygiene, nutrition, geriatrics and cancer control, dental health, and industrial hygiene, each of which, in turn, should be headed by a chief.

4. There should be a Division of Sanitary Engineering under the direction of its director which should include bureaus as follows: water, sewage and general sanitation; milk and food handling establishments; housing; pure food and drugs; rodent control; and insect control; each of which, in turn should be headed by a chief.

5. There should be a Division of Central Administration, under the direction of its director, which includes the following units: business management, personnel administration, public health statistics, and public health education, each of which, in turn, should be headed by a chief.

6. A Division of Local Health Services should be established.<sup>1</sup>

7. The Division of Local Health Services should include a bureau of public health nursing which should be headed by a chief and should include an assistant chief for education.<sup>1</sup>

8. A school health section should be established in the Division of Local Health Services or in the Maternal and Child Health Bureau.

## PERSONNEL

9. The health officers of the counties of Hawaii, Maui and Kauai should be experienced, qualified physicians; and, under the direction of the President and Director of the Division of Local Health Services, have full power and responsibility for the administration of the public-health programs in their counties.

10. The Director of the Division of Local Health Services should have direct supervision of the operating program in the City and County of Honolulu and should supervise the activities of the several county health officers.

11. The specialists and the directors of the various bureaus and divisions (except the Director of the Division of Local Health Services) should be merely consultants to the health officers of the counties of Hawaii, Maui and Kauai and not exercise authority over them except at the direction of the President through the Director of the Division of Local Health Services.

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<sup>1</sup>Recommendation presently in effect.

12. The government physicians in the counties of Hawaii, Maui and Kauai should be under the direction of the health officer for the county; in the City and County of Honolulu, under the direction of the Director of the Division of Local Health Services.

13. The President should be freed from the details of internal administration, that he may be able to devote himself to public relations, policy-making, observation and analysis of Department of Health operations, and to the total health situation in the territory, broad program making, and keeping in touch with the best thought on public health in the territory and elsewhere.

14. Department of Health positions should continue to be classified by the Personnel Classification Board of the territory; but the Department of Health and Personnel Classification Board should seriously consider the appropriateness of various classifications and job descriptions and of commencing in the near future the limited use of the P-8 classification.<sup>1</sup>

### **FINANCIAL ASPECTS**

15. The legislature should grant a single departmental appropriation for the Department of Health, based on a budget, and allocable by the Department of Health to its various uses according to its best judgment. Quarterly allotments would be made on the basis of detailed budgets and at the end of each biennium the department should be required to report to the Governor and to the legislature its use of the appropriation.

16. Whenever the hospitalization of any person is *required* by law for contagious disease, the Board of Health should pay the expenses of such isolation or hospitalization or make available without cost the facilities for such isolation or hospitalization.

### **SPECIAL PROBLEMS**

17. The Department of Health should be provided with a new building in Honolulu, which would include a new health center. The Kapahulu and Lanakila Health Centers should be continued and devoted exclusively to the local health program. Department of Health facilities at Hilo, Wailuku and Lihue, now inadequate, should be expanded and improved. Modern, clean and attractive Department of Health facilities should be established at strategic locations in each county as the local health centers.

18. The medical care program for indigents, now divided between the Department of Health and the Department of Public Welfare, should be made less cumbersome in its operation.

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<sup>1</sup>Recommendation presently in effect.

## SANITATION

Sanitation has always occupied an important place in public health. The first health departments to be established were concerned exclusively with environmental sanitation and quarantine. They were interested mainly in municipal cleanliness, water supply sanitation, and the control of gross dirt. These emphases often continue to be the layman's total conception of public health. Many additional functions have been added to health departments, but their fundamental interest in sanitation has not thereby been lessened.

History, geology and geography have combined to underscore Hawaii's needs in this field. Local topography often makes proper drainage difficult. The sub-tropical climate of the islands necessitates watchful vigilance in combating insect pests, some of which are human disease vectors or detrimental to the agriculture economy. As America's gateway to the Orient, the territory represents a focal point for guarding against importation of diseases from other countries. The physical expansion of Honolulu and other urban areas in the territory has outpaced the sewerage system, which many authorities regard as woefully inadequate. The rapid development of preventive medicine and public health reveals the inconsistency or obsolescence of some legislation.

Ramifications extend into many phases of life in the islands. The purity of foods and drugs must be protected by strict laws, careful inspection and trained workers. Memory of the near-catastrophe of the 1900 plague epidemic encourages rigorous rodent control. Efforts must be continued to minimize the breeding of mosquitoes. Parasitic and animal-borne diseases are sufficiently prevalent to require the services of the parasitologist. Water control and garbage and sewage disposal are, even more obviously, problems demanding attention. In its report, the Committee on Sanitation assigned a separate topic to each subcommittee.

The final report of the Committee, *Hawaii's Sanitation Problems*, was published in September 1946. It recognizes fully the broad scope and local significance of sanitation and related problems. Its recommendations are repeated below.

### PURE FOOD AND DRUGS

#### Food Establishments

##### *Recommendations for Immediate Action*

1. The Department of Health should consider the formulation of necessary amendments to present statutes in order to achieve long-range legislation recommendations.
2. Committees consisting of dealers concerned and department of health representatives should be organized to study carefully and recommend specific individual public health regulations governing:
  - a) Bakeries
  - b) Meat markets
  - c) Meat and food carts

- d) Confectionery shops
- e) Ice cream parlors and soft-drink establishments
- f) Food establishments at all public affairs including carnivals, circuses, public exhibitions and other similar gatherings
- g) Restaurants, cafes and other eating and drinking establishments including lunch wagons
- h) No oysters, clams, scallops or other shellfish shall be sold or offered for sale unless such shellfish shall have been produced and shipped in conformity with the regulations of the state in which they were grown or packed, and unless the shipment shall have been accompanied by tag, label, or other mark showing that shipper has been duly certified by the state in which his plant is operated, such certification having been approved by the United States Public Health Service for shipment in interstate commerce.

3. Increase in food inspection personnel should be established on the basis of findings obtained from a study of population-inspector ratios, cost data, other pertinent data and type of program recommended.

4. A committee should be appointed to study and report on the cost per capita and inspection standards for food inspection work in the Territory of Hawaii and states of the Union and to investigate and report on the question of specialized inspection versus general inspection.

5. An in-service training program of inspectional personnel should be expanded to include training and guidance in educational methods. This training should be conducted by the Division of Public Health Education.<sup>1</sup>

6. The Public Health Administration committee should consider the strengthening and expansion of the Bureau of Public Health Education to meet the demands and needs for an adequate in-service educational program.

7. A standard classification of food establishments should be made on a territory-wide basis.

#### *Long-Range Objectives*

8. The empowering act, C. 35, Sec. 2015, R.L.H. 1945, should be amended to omit references to types of food establishments but to include all types of food or food product manufacturing and preparation establishments. In the event this simplification of the statutes is unattainable, C. 35, Sec. 2015, R.L.H. 1945 should be amended to empower the Department of Health to make regulations governing:

- a) Establishments engaged in the manufacture of frozen sweets, including ice cream
- b) Bottling works
- c) Canneries
- d) Pickle factories
- e) Tofu (soy bean curd) factories
- f) Soy factories

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<sup>1</sup>Recommendation presently in effect.

g) Preparation of food or food products which will be sold or offered for sale by itinerant vendors.

9. C. 133, Sec. 7073, R.L.H. 1945 should be amended to include a provision requiring a food manufacturer to obtain a permit from the Board of Health after filing an application indicating the type of foods or food products he intends to prepare, together with ingredient statements. The permit would cover only the food or food product class shown on the permit.

10. C. 35, Sec. 2015, R.L.H. 1945 and C. 133, Sec. 7082, R.L.H. 1945 should be amended to provide for the suspension, or revoking of a permit issued by the Department of Health after due hearing, for insanitary practices as well as physical conditions and provided that the license is dependent upon the permit.

11. A new statute should be added providing for all salvageable foods and drugs to be sold with a sign indicating that the goods offered for sale were "fire salvaged goods" or "water salvaged goods" as the case might be.

### **Drugs and Cosmetics**

#### *Recommendations for Immediate Action*

12. Legislation jointly sponsored by the Department of Health and the Board of Pharmacy should be submitted to the legislature. Such legislation would require that before a manufacturer can engage in the business of manufacturing, or repackaging drugs, devices or cosmetics, he first obtain a permit from the Department of Health after filing an application with the department. This application would show the drugs, devices, or cosmetics that he intends to manufacture with ingredient statements of the drugs or cosmetics. These drugs, devices, or cosmetics would pertain only to those manufactured or repackaged and offered for sale to the general public.

13. The board should be empowered to suspend or revoke such permits after due hearing.

14. A committee should be appointed to study and report on the cost per capita and inspection standards for drug, device and cosmetic inspection work in the Territory of Hawaii and states of the Union and to investigate and report on the question of specialized inspection versus general inspection.<sup>1</sup>

15. Increase in drug, device and cosmetic inspection personnel should be established on the basis of findings obtained from a study of population-inspector ratios, cost data, type of program recommended and other pertinent data.

#### *Long-Range Objective*

16. C. 46, Secs. 2531-2534, R.L.H. 1945 should be repealed.

### **Meat Inspection**

#### *Recommendations for Immediate Action*

17. The City and and County Ordinances pertaining to slaughtering of animals should be revised and new ordinances prepared. The proposed regulations

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<sup>1</sup>Recommendation presently in effect.

should be modeled after the Federal Meat Inspection Act, Bureau of Animal Industry Order 211, Revised.

18. The Department of Health standards on slaughterhouse construction should be revised and the standards elevated to eliminate the one-room country abattoir.

19. In the revisions of the City and County Meat Inspection Ordinance #981, it should include provisions for the inspection of domestically-manufactured meat products as sausages, etc.

20. The small, one-room type of slaughterhouse should be eliminated by legal means whenever an opportunity arises.

21. The outlying islands should endeavor to have slaughtering centralized in the different districts.

#### *Long-Range Objectives*

22. There should be adoption of a territorial meat inspection act, comparable to the Federal Meat Inspection Act but modified to meet conditions peculiar to the territory.

23. Territorial Department of Health veterinarians on Hawaii, Maui and Kauai should be employed as meat inspectors on a part-time basis, the cost of inspection being borne jointly by the territory and by the slaughterers.

24. There should be only four centralized abattoirs on the island of Oahu, each in charge of a qualified veterinary inspector. The proposed location of the centralized abattoirs should be as follows: Windward Oahu, Kaneohe; Southwest Oahu, Ewa; Northwest Oahu, Waialua; City Oahu, Kalihi.

25. All slaughterhouses on the outside islands should be replaced by a limited number of strategically located units approved according to improved standards. As an alternative to the above, it is recommended that government-owned abattoirs be constructed and supported by persons offering animals to be slaughtered on a fee basis.

26. All flesh food should be required to pass an ante- and post-mortem examination before such food is sold or offered for sale.

#### **Milk**

##### *Recommendations for Immediate Action*

27. Higher grades than Grade A for milk products should be eliminated.

28. Board of Agriculture and Forestry should adopt a regulation which definitely states the frequency of testing for Bang's disease as well as the manner in which this frequency is applied, and the measures taken to control and eradicate the disease.

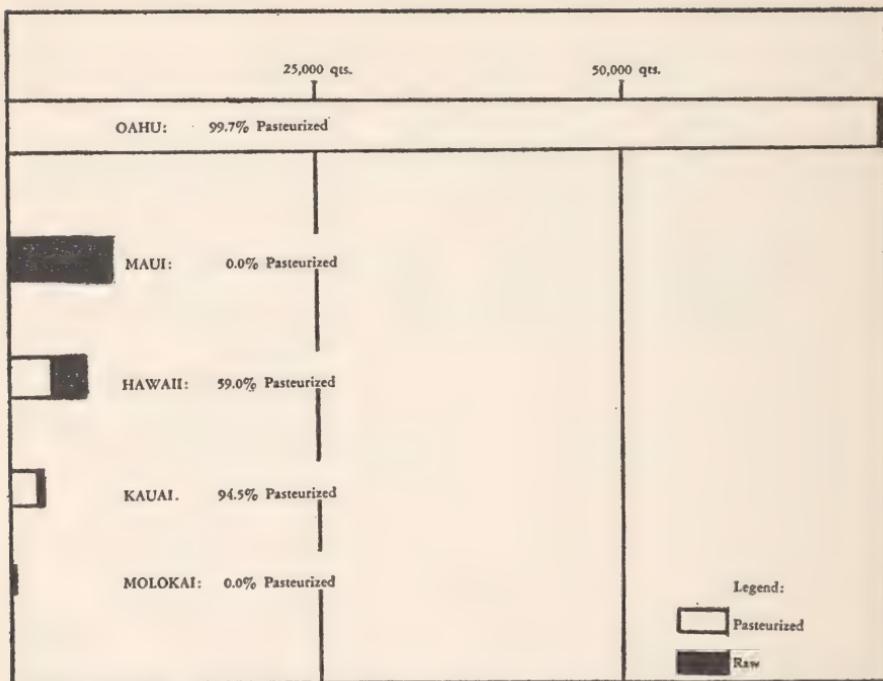
#### *Long-Range Objective*

29. Territory-wide pasteurization of milk should be provided for.

#### **RODENT CONTROL**

##### *Recommendations for Immediate Action*

30. An adequate program of typhus fever control should be instituted in Honolulu. The additional twenty positions requested for this work, which were



Average Daily Sales of Pasteurized and Raw Milk by Island, 1947

Source: Annual Report of the Board of Health, T. H., 1947.

provided for by the 1945 Territorial Legislature, should be filled in the immediate future.<sup>1</sup>

31. The Department of Health should review rodent control regulations for the purpose of making such revisions or additions as will clarify the regulations to facilitate proper enforcement.

32. Enabling ordinances or regulations should be adopted which will provide for the establishment of a localized typhus fever control program embodying inspection of buildings, ratproofing repair of buildings and rodent eradication.<sup>2</sup>

#### Long-Range Objectives

33. A sustained and intensive plague control program should be put into effect at the endemic plague areas on Hawaii and Maui until laboratory examinations of rodents and ectoparasites demonstrate conclusively the absence of this infection among rodents; and upon review by the United States Public Health Service.

34. Limited plague surveillance programs should be undertaken at the major ports including adequate laboratory examinations of rodents and ectoparasites to detect and check the introduction or spread of bubonic plague.<sup>1</sup>

<sup>1</sup>Recommendation presently in effect.

<sup>2</sup>This recommendation has been accomplished to date without ordinances, but perhaps ordinances will be necessary eventually to complete the work.

35. Prosecution of an adequate typhus fever control program in Honolulu comprising ratproofing, rodent eradication, and ectoparasite control is recommended.<sup>1</sup>

36. Dissemination of information on the subject of rodent control through the schools and health education channels is recommended.<sup>1</sup>

37. Other official agencies whose routine activities directly or indirectly affect rodent control should place proper emphasis on such phases of their programs. Three specific examples might be cited.

a) The Bureau of Sanitation of the Department of Health, should enforce the use of proper garbage storage facilities, and review all building plans to assure compliance with sanitation and ratproofing regulations.<sup>2</sup>

b) The Garbage Division of the Honolulu Department of Public Works should require the provision of proper garbage containers on all premises and take steps toward a more sanitary collection and disposal of garbage and refuse.

c) The City Planning Commission should enforce zoning ordinances prohibiting pig farms in communities and built-up rural areas and chicken raising in urban residential districts.

### MOSQUITO CONTROL<sup>3</sup>

38. Present quarantine activities by the U. S. Public Health Service should be continued indefinitely with the presence of a trained entomologist and such additional personnel as may be necessary to insure proper control over insects of medical importance which might otherwise be introduced into the Territory of Hawaii.

39. A permanent Bureau of Mosquito Control should be established under the Division of Sanitation, Territorial Department of Health, staffed by qualified technical, supervisory and inspectional personnel, providing a staff of 35 persons.<sup>4</sup>

40. The territory should provide a biennial budget sufficient to carry out a consistent mosquito control program.<sup>1</sup>

41. The territory should employ a nucleus of well-trained workers for a mobile unit organization to provide protection to any area in the territory. This unit could direct an expanded mosquito control program in case of an emergency.<sup>1</sup>

42. Efforts should be made to maintain a low *Aedes* mosquito breeding index in Honolulu and Hilo, using standard mosquito control procedures.<sup>1</sup>

43. A continuous supply of larvicides and adulticides should be maintained to meet any emergency (DDT and pyrethrum are recommended).<sup>1</sup>

44. Research should be carried on for more effective control methods and larvicide.<sup>1</sup>

45. Surveillance around airports and ports of entry for new species of mosquitoes should be maintained.<sup>1</sup>

46. Technical advisory service should be provided to prevent creation of major mosquito breeding hazards.<sup>5</sup>

<sup>1</sup>Recommendation presently in effect.

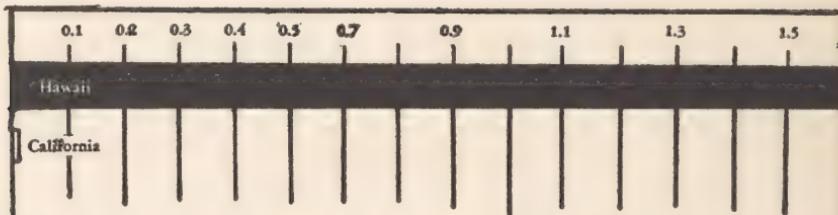
<sup>2</sup>Recommendation presently in effect, but this is a continuing program.

<sup>3</sup>All suggestions and recommendations of the subcommittee specified immediate action.

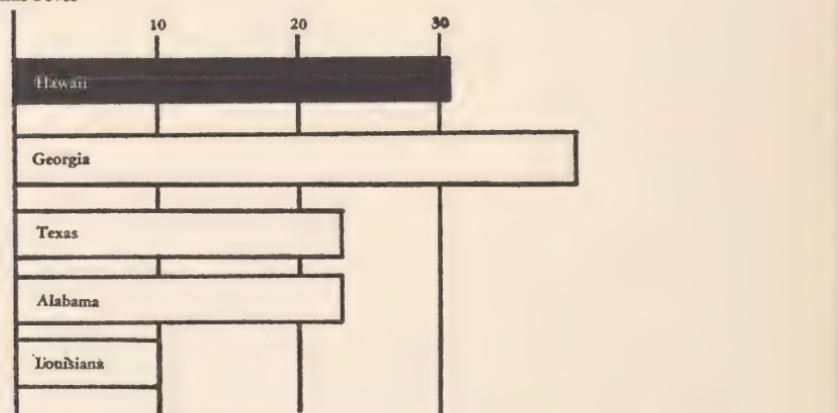
<sup>4</sup>Recommendation in effect, except for size of staff.

<sup>5</sup>This service is provided by the Chief of the Bureau of Mosquito Control, and Medical Entomologist.

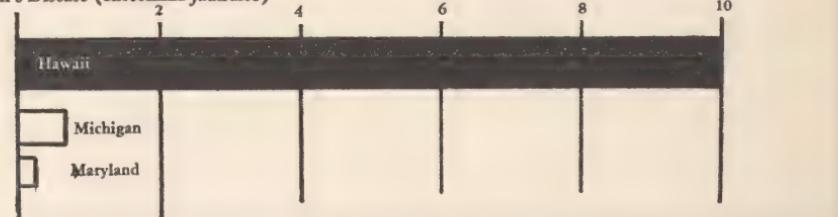
### Bubonic Plague



### Typhus Fever



### Weil's Disease (Infectious Jaundice)



Incidence per 100,000 Population of Reportable Rat-borne Diseases  
Hawaii and Other States With High Incidence

1943

Source: *Public Health Reports*, March 17, 1944.

47. Continuous education of the public should be promoted in mosquito control, using educational methods now in use.

48. The inclusion of information on mosquito control in the school curriculum should be encouraged.

49. Divisions of Health Education should be promoted through the Territorial Department of Health and the Department of Public Instruction. Educational material is available in the Bureau of Mosquito Control of the Department of Health.

## PARASITOLOGY<sup>1</sup>

50. To obtain better knowledge of parasitic and animal-borne diseases present in the Hawaiian Islands or likely to be introduced, and to effect better control measures, research in human parasitology of public-health significance should be incorporated into an institute for diseases peculiar to the Pacific. This may be established either at the University of Hawaii or in the program of the Bureau of Laboratories of the Department of Health.

51. Research should be undertaken by the Territorial Department of Health regarding the medical significance and importance to the community of these problems.

## WATER CONTROL

### Recommendations for Immediate Action

52. The Department of Health should adopt a set of regulations setting standards of potability to be used as a basis for certification of water supplies and specifying the procedure for granting, renewing and canceling certifications.

53. Legislation should be adopted appropriating sufficient moneys to permit the purchase by the territorial government of approximately 1,800 acres of privately owned land within the watershed forest reserve to prevent future private development.

54. Adequate moneys should be provided by the next legislature to permit construction of the Class A projects recommended by the firm of Metcalf & Eddy extending the Honolulu sewerage system to eliminate cesspools in the city of Honolulu.<sup>2</sup>

### Long-Range Objectives

55. The Department of Health, with the cooperation of the water works authorities concerned, should organize continuing surveys of the larger distribution systems, for sanitary defects and health hazards in accordance with the U.S.P.H.S. Drinking Water Standards of 1946.

56. Eventual public ownership of all watershed areas is desirable.

57. The Suburban Water System proposes within the next ten years to add approximately 20,000,000 gallons of water per day to all suburban systems. These projects as they arise should be given full support by all agencies concerned.

<sup>1</sup>Both recommendations of this subcommittee specified immediate action.

<sup>2</sup>Financing for all Class A projects which can be handled through 1950 has been secured.

58. Approval for subdivisions located near existing sources of water supply should continue to be withheld by health and other authorities concerned unless arrangements for sewage disposal are such as to prevent any possibility of contaminating these sources of supply.

59. There is a need for the segregation of wells with low chloride content for domestic use on the plantations.

60. The Department of Health should cooperate with private agencies supplying water to develop adequate and suitable treatment facilities to achieve conformity of water quality with the standards to be adopted.

## SEWERAGE

### Recommendations for Immediate Action

61. Every effort should be made to effect a sewerage program at the earliest possible date to provide modern sanitation for the City of Honolulu.<sup>1</sup>

62. Adequate funds should be provided to carry on needed operation and maintenance work.

### Long-Range Objectives

63. It is proposed to construct sewerage facilities in accordance with the Metcalf & Eddy report (Phase A) totaling \$9,403,000 during the first five years (1947-52). Included will be (a) sewage-collection additions to be designed by Austin & Towill, (b) sewage-disposal additions to be designed by Metcalf & Eddy, and (c) the completion of the sewerage of the remaining 35% of the Honolulu area now unsewered, in accordance with the sewerage assessment statutes.

64. Thereafter, Phases B and C are to be completed in accordance with the "master plan" of the 1944 Metcalf & Eddy report requiring six years more (1952-1958) and \$6,000,000 to complete.

## GARBAGE DISPOSAL

### Recommendation for Immediate Action

65. Steps should be taken to enforce provisions of City and County garbage ordinances which require householders and businesses to place refuse so as to require removal of same from *within* their properties.

### Long-Range Objectives

66. City and County legislation should be enacted to provide for segregation of all refuse by householders and/or businesses into three classifications, namely, combustible, non-combustible, and refuse suitable for hog feed; and the same should be placed in separate containers for removal by constituted authorities.

67. Complete control of the removal of kitchen waste should be placed with the City and County of Honolulu and consideration should be given to obtaining proper facilities and equipment for handling in a satisfactory and sanitary manner.

68. An additional modern incinerator of a capacity equal to, if not greater than, that now nearing completion in Kewalo and Kapalama should be located between Moiliili and Kuliouou.

<sup>1</sup>Generally achieved by carrying out the Metcalf & Eddy recommendations.

## SCHOOL HEALTH

General interest in school health has become increasingly evident through the years, receiving a special impetus during the Second World War. Such interest, stimulated first by the 1917-18 draft findings and later by such activities as the American Child Health Association's survey of 86 cities, had grown sufficiently during the 1930s to result in school health programs of varying scope and effectiveness throughout America. Then, examinations for the draft during the recent war disclosed a disconcertingly high percentage of individuals with defects which, with proper attention during childhood years, could have been prevented. These findings constituted a major cause for the markedly increased interest evidenced throughout the United States in recent years in the health of the school child.

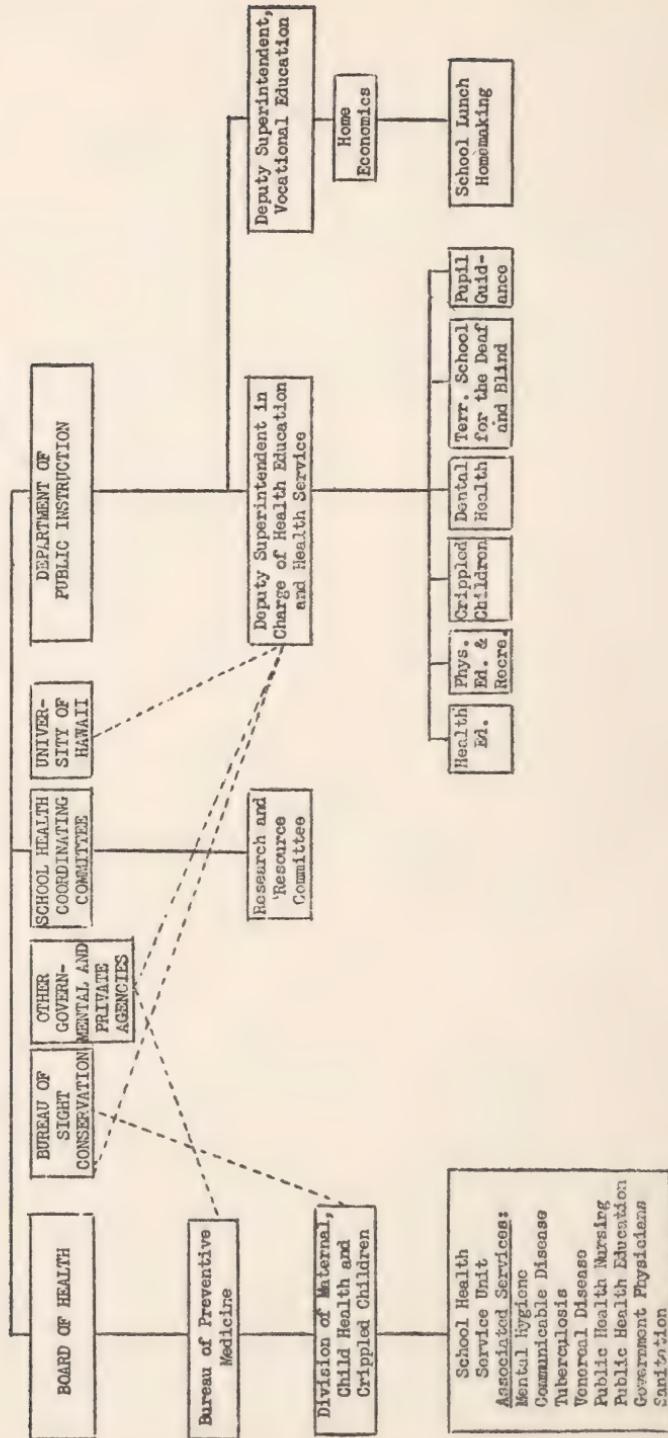
This heightened interest was accompanied by a less restricted concept of the role of school health. Such health was no longer regarded merely as an end in itself but rather as a part of the total educative process. As in other phases of education, health instruction should result in the formation of proper attitudes, development of good habits, and the attainment of knowledge. These objectives can be achieved only by having children participate in activities which are conducive to wholesome daily living. Besides the educational aspects, school health activities are concerned with physical growth, proper mental and emotional development, and correction of remedial defects.

There has also been recognition of the many important facets to a comprehensive school health program. Specialized problems of administration occur. Adequate attention must be provided for medical examinations, correction of health defects, dental health, communicable disease, mental hygiene and a nutrition program. School nursing, sight conservation and teacher training are other factors to be considered. There must be provision for health instruction programs, physical education, and leisure-time activities. Consideration is given to all these problems in the following study.

The development of an adequate school health program is not a matter of a few days or weeks. The Postwar Planning Committees' study (*School Health Programs, Territory of Hawaii*) was published in December 1946. It calls for a broad program with cooperation from many agencies and individuals for joint participation and cooperation among parents, teachers, health workers, the professions and other interested groups. The role of the parent, who has final responsibility, is especially emphasized. Successful conduct of the proposed programs depends upon the establishment of an administrative structure in which all groups can function effectively, and upon group planning and periodic evaluation of programs. These are long-term goals, but they necessitate some immediate action.

A description of present facilities and programs and an expanded account of suggestions for the future can be found in the original report.

## PROPOSED ADMINISTRATIVE CHART SHOWING COORDINATION OF SCHOOL HEALTH PROGRAM



## ADMINISTRATION OF THE SCHOOL HEALTH PROGRAM<sup>1</sup>

1. An individual eminently qualified in the area of school health should be employed as administrator of the program.
2. Qualified staff members are needed to head up the programs of physical education and work with handicapped children of the Department of Public Instruction, with added clerical staff in addition to the director and assistant director for health education.
3. A school-health service unit should be established in the Bureau of Maternal and Child Health. Personnel could well include a pediatrician with training in public health and education as director, and a public health nurse consultant with training and experience in school-health work, to devote full time to school health. The unit would serve to bring together the Department of Health and the Division of Health Education of the Department of Public Instruction in studies, planning, policy and program making; in channeling health education material and services of other divisions of the health department effectively into the school health program; and in giving supervision of medical and nursing activities in the school-health program as jointly agreed by the Department of Public Instruction and Department of Health.

4. The following form of administrative organization is proposed:

A. On the top level a School Health Coordinating Committee is recommended, composed of the President of the Board of Health, Superintendent of Public Instruction, Deputy Superintendent of Special Services, Director of the Division of Preventive Medicine, directors of the divisions of Health Education and Work with Handicapped Children and of the School Health Service unit, with two other members appointed by the respective heads of the Department of Health and the Department of Public Instruction—probably a Supervising Principal and the Director of Local Health Services or Bureau of Maternal and Child Health. This committee should give approval to all policies and programs to be submitted to their respective boards for final approval, as worked out by the School Health Service unit of the Department of Health and the Division of Health Education and Health Services of the Department of Public Instruction through their respective staffs and advisory committee. In the event of lack of agreement on a lower level, controversial points would be referred to the coordinating committee for settlement.

B. On the second level, the School Health Research and Resource Committee<sup>2</sup> should consist of a working nucleus composed of the chief of maternal and child health and crippled children, the director of school health services of the Department of Health, and the director of health education and work with handicapped children, with their respective professional staffs. On this committee, it is suggested that permanent representation from the following groups be included: P.T.A., medical society, dental society, the University of Hawaii, representation from each of the three school levels, and a supervising public health nurse. Members of this committee other than the nucleus of professional staff would be appointed by the executive officer of the respective

<sup>1</sup>All recommendations of this subcommittee were for immediate action.

<sup>2</sup>This committee is functioning, meeting once a month.

organization with the approval of the School Health Coordinating Committee. Consultants and specialists would be called upon to serve in an advisory capacity from time to time as problems arise in their respective fields.

This committee should meet regularly. The chairman of this committee should be a well-qualified person outside the Department of Health or Department of Public Instruction, selected with the mutual approval of both agencies.

C. The Research and Resource Committee should be responsible for joint development of policies and programs for presentation to the School Health Coordinating Committee. Upon approval by the Coordinating Committee, the Research and Resource Committee would be responsible for carrying out the program.

5. When the Coordinating Committee is established, the question of financing the school health program should be one of its major considerations. Reference is made to the recommendations for additional personnel contained in the special reports. Decision as to the financial responsibility each organization should take in the area of school health services should be resolved by the Coordinating Committee.

Whatever financial arrangement is determined, a plan of organization and coordination (as suggested above) is essential for optimum efficiency of an adequate program.

## MEDICAL EXAMINATIONS AND CORRECTION OF HEALTH DEFECTS

### Recommendations for Immediate Action

6. An additional physician should be employed by the Territorial Department of Health to allow two visits to each school during the school session, thus making it possible to visit all schools earlier in the school year, and permit a return visit for follow-up.

7. The teacher-health chairman-public health nurse conferences in screening children for special examination should be given more time; and more guidance and assistance in understanding the health needs of children should be given by the staffs of the Department of Health and Department of Public Instruction.<sup>1</sup>

8. A more uniform program of school health examinations should be established throughout the territory for handling routine or referred cases either in the school or in offices of the private physicians.

9. Every child participating in strenuous activity should be examined by a physician and a statement submitted as to fitness to participate.

10. Emphasis on the health education value of the examination should be given, allowing sufficient time for discussion of problems with students and with parents of younger children. At least 10 minutes should be allowed for every examination.

11. Time should be allotted for review of physical-examination findings by the physician with the nurse, the teacher, the health counselor, and the parents.

12. A school-health unit should be established in the health department with a staff consisting of a pediatrician with training in public health and educa-

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<sup>1</sup>Recommendation presently in effect.

tion, and a public health nurse consultant in school health, to devote full time to:

- a) A study of school health services;
- b) Consultation with school staff, school physicians and public health nurses;
- c) Joint planning with the Division of Health Education, Department of Public Instruction, as to the content of the program.

13. Form #14 should be modified to permit more space for information. It might be advisable to develop a form to be kept by the teacher in the classroom. Copies of Form #14 should be sent annually to all physicians with an explanation as to its purpose and use.<sup>1</sup>

14. The forms for the preadmission examination and for referral for special examinations by private physicians should be as brief as possible but should cover pertinent health information.

15. Routine weighing and measurement of elementary school children should be conducted at three-month intervals for weight and twice yearly for height; for intermediate and high school students, twice yearly for weight and height.<sup>1</sup>

16. All children should receive an audiometer test once every three years.

17. Provision should be made for referral of all children found by an audiometer test to have a hearing disability to a medical specialist in ear, nose and throat for corroboration of the diagnosis.

18. A complete physical examination of school personnel should be required every three years.

19. The present x-ray requirement should be given careful study to determine whether more frequent x-rays should be required.<sup>1</sup>

20. Closer follow-up of medical recommendations should be observed.

21. All children should be referred to the health room for first aid.

22. Greater effort should be made to interest students and parents in the follow-up of defects or health conditions by:

- a) Increased emphasis on pupil-teacher (or nurse-health chairman) conferences.
- b) Referral to public health nurses for follow-up.
- c) School physician through direct contact between himself and family physician.
- d) Provision for rest, special diet, or modified activity for children at school who need these services.

23. The present school health policy should be continued, placing responsibility upon parents for medical care.

### **Long-Range Objectives**

24. Every child should have health examinations at periodic intervals, at least once in the elementary, intermediate, high school grades and at other times whenever indicated. These examinations should be done by private physicians

<sup>1</sup>Recommendation presently in effect.

and school physicians and coordinated with the total school-health guidance program.

25. When funds are available, the services of school-health physicians should be provided for all schools by the health department, using part-time private physicians and/or full-time Health Department physicians. Such physicians would work under the supervision of the school-health unit of the health department, with joint planning with the Division of Health Education of the Department of Public Instruction through a coordinating committee.

26. A careful study should be made of all forms, records and method of procedures to develop a simple and adequate system of school-health records.

27. All special programs involving medical services should be reviewed as to content and methods by the school health supervisory staff of the Department of Health and Department of Public Instruction in order that a balanced emphasis may be given and a coordinated program developed.

28. Dental services for the correction of defects should be provided in those schools where dental services cannot be otherwise obtained.

## DENTAL HEALTH

### Recommendations for Immediate Action

29. One Assistant Supervising Dental Hygienist and eight Dental Hygienists should be employed to fill positions created by legislative enactment.

30. Worn-out equipment should be replaced.

31. Dispensaries in schools should be reserved for dental hygienists and health workers.

32. The program of the Strong-Carter Clinic should be expanded to care eventually for all children who cannot be served otherwise, including all schools.

33. Funds should be reserved for services until such time that eligibility will increase.

34. A definite policy governing conduct of the Department of Public Welfare program should be established.

35. Clinics should be expanded to include as many schools as possible.

36. Some plan should be devised whereby the Territory pays at least part of the Dental Hygienist's salary.

37. The University, in cooperation with the Department of Public Instruction and other agencies in a position to assist with recruitment, should continue to explore every possible means of securing an adequate number of qualified persons for dental-hygiene training.<sup>1</sup>

38. One Administrative Assistant and ten Dental Hygienists should be employed by the Department of Public Instruction as soon as possible. The program then should include prophylaxis in elementary schools above Grade IV.

39. The position of Clerk-Stenographer should be of a higher classification, perhaps CAF-4 or CAF-5.

40. More dentists should be located in rural areas. A dental program should be developed for plantation children. There should be more cooperation with schools.

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<sup>1</sup>Recommendation presently in effect.

41. More funds should be appropriated for travel. This should include travel of dental hygienists on the outlying islands to Honolulu annually for conference.

### Long-Range Objectives

42. The program should be expanded to correspond with that recommended for public schools.

43. Every school should maintain a modern well-lighted, well-equipped dispensary.

44. More dental hygienists should be added to the staff of the Strong-Carter Clinic.

45. Dental hygienists should work in all intermediate and high schools.

46. The program for the training of dental hygienists should continue in Teachers College.

47. A Chief Hygienist should be provided in each county.

48. One additional clerk should be added to the staff as work expands.

## SCHOOL NURSING

### Recommendations for Immediate Action

49. Adequate space should be set aside in each school for health work.

50. Provision should be made for employment of a school-nursing consultant to work with nursing supervisors, staff and schools to coordinate and extend the services. She should be employed by the Department of Health and should supervise all the nurses doing school-nursing work.

51. The staff positions of the Bureau of Public Health Nursing should be increased to bring the ratio to one nurse to 5,000 population. This is the minimum ratio for generalized nursing programs exclusive of bedside-nursing care.<sup>1</sup>

52. In making appointments to these positions, preference should be given to nurses who have completed an accredited college course in public health nursing and who have had at least a year's experience in generalized public health nursing under supervision.

53. Large schools, including all high and intermediate schools, should employ full-time nurses who work closely with the Department of Health nurses within districts.

54. Nurses' districts should be set up to conform to elementary school districts as far as possible, giving consideration to school load in setting up the districts.

55. A school health council should be formed in each school to work out the health program.<sup>2</sup>

56. The nurse should join the teacher in building up the effectiveness of teacher-nurse conferences. Time should be set aside to review the health records of each child so that it is possible to learn early in the year where the needs are, and concentrate efforts where needs exist.

57. The nurses should have a definite time in the school to be available for conferences with teachers and to assist schools in:

<sup>1</sup>American Public Health Association, *Units of Local Health Service for All the States*, April, 1943.

<sup>2</sup>Recommendation presently in effect in many schools.

- a) Individual cases—interpretation of home conditions and assistance in arranging for necessary care.
- b) As technical advisor in health program material.
- c) Assisting physician with health examinations and follow-up.
- d) Supervision of the person in school designated to be responsible for first aid and care of emergency illness.
- e) Education of teachers in how to watch children for deviations from normal.
- f) Building up health record materials so they become more useful to the school.

### Long-Range Objectives

58. Provision should be made for well-planned health units in new schools being built.

59. Consideration should be given to the employment of two consultants when necessary. There may be need for two such persons, one for Oahu and one to devote her time to the other islands.

60. Consideration should be given to a nurse-to-population ratio of 1:2500, which would provide for a bedside-care service and a much more adequate school-health program.

61. Eventually the Department of Health should supply all nursing service, both full time and part time.

## COMMUNICABLE DISEASE CONTROL

### Recommendations for Immediate Action

62. A booster injection of combined diphtheria-tetanus toxoid should be required by regulation or law before a child enters school.

63. Smallpox revaccination should be encouraged during the senior year (12th grade).

64. The school department should check with the Department of Health during the first month of school in regard to immunization records to determine that each child has been immunized against smallpox, typhoid, and diphtheria.

65. All kindergarten and first-grade students, upon entering private or public school, who have not been vaccinated against smallpox and immunized against typhoid and diphtheria should be referred to the Division of Pupil Guidance, Department of Public Instruction, prior to referral to the Department of Health.

66. In order to detect communicable disease at the earliest opportunity and to lessen the number of effective contacts, an in-service training program for teachers and health counselors should be developed by the Department of Public Instruction in cooperation with the Territorial Department of Health to insure proper screening procedures.

67. Morning inspection should be made a routine procedure in all kindergartens, primary grades, and for all workers in cafeterias.

68. All health counselors should be certified by the American Red Cross to administer first aid.

69. All full-time cafeteria workers should have chest x-rays every two years. This measure is designed to lessen effective contact between carriers and other children.

70. Any workers absent three days or more due to illness should be required to present a statement signed by a physician certifying that they are free from communicable disease.

#### **Long-Range Objectives**

71. Nursing services should be provided for all intermediate and secondary schools.

72. Home visits should be made in connection with all cases of communicable disease.

73. Nurses should start the day's work at school by checking children for communicable disease exclusion on referral by health counselor through the classroom teacher.

74. X-ray records of all school children should be filed with the Department of Health.

### **SIGHT CONSERVATION**

#### **Recommendations for Immediate Action**

75. Three professionally trained teachers are needed in classes at present.

76. A salary differential should be made for all teachers trained and engaged in sight-conservation class work.

77. A study should be made relative to integrating blind students into regular intermediate school programs.

78. More large-print material should be obtained.

79. One teacher in each school should be designated to assist the Bureau of Sight Conservation worker in making educational adjustments for partially-sighted and blind students who are enrolled.

80. Every fifth-year student in teachers' training should be required to take a survey course in sight conservation.

#### **Long-Range Objectives**

81. New sight-saving classes should be opened when enrollment warrants them.

82. Local teachers who would be qualified and available when vacancies occur should be trained for sight-saving work.

83. The high school sight-saving program should be developed more completely so students will have adequate assistance.

84. A school architect should be employed to plan for better lighting in school and buildings.

85. Every classroom should meet lighting standards set by the Illuminating Engineering Society for school lighting.

86. There should be on the Bureau of Sight Conservation staff a trained vocational counselor to work with students.

### **TEACHER TRAINING**

#### **Recommendations for Immediate Action**

87. More adequate lunch room facilities should be provided, as soon as

these are purchasable, for the elementary and intermediate laboratory schools.

88. A full-time secretary should be employed for the physical education program, in addition to the present secretary devoting full time to health and physical education.

89. A physician should be employed full time.

90. Additional personnel for health instruction and supervision in the University of Hawaii Teachers College should be employed. One person cannot give adequate attention to (a) pre-school nursing responsibilities, (b) the public school health course, and (c) supervision of health instruction in three laboratory schools.<sup>1</sup>

91. Part-time service of a pediatrician for the pre-school unit should be provided.

92. A health-education committee on teacher training should be set up, composed of representatives from the University department of health and physical education, University education department, the Department of Public Instruction, and the Department of Health. This group is needed for coordinating purposes, and to provide closer relationships among the various University services and Teachers College to make all resources more readily available to prospective teachers. A committee representing each area is suggested.

93. Greater attention should be given to intramural health activities.

94. University-wide health examination programs should be extended.

95. Health recording and follow-up should be improved.

96. Study and evaluation of courses, services, and procedures for health-education teacher preparation should be continued with special reference to (a) possible insufficiency of specific courses, and (b) content of courses being offered to insure utilization of time to best advantage and the avoidance of unnecessary duplication.

97. There should be a follow-up of recent health education workshops with teachers in service.

98. All prospective teachers should take at least one course in the field of nutrition.

99. There should be an extension of special health supervision service to intern student teachers during the fifth year, including a physical fitness examination at the beginning of this experience, as well as at the beginning of practice teaching the fourth year.

100. Concerted effort should be made to secure greater interest in dental hygiene as a profession and more adequate means of recruitment.

101. Continued study should be made of the new program in physical education and recreation.

### Long-Range Objectives

102. A university dispensary, fully equipped with beds and having adequate nursing and medical service, should be constructed. With the contemplated increase in student dormitories, a hospital will be essential.

103. A second university gymnasium should be built, making one available for men students and the other for women students.

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<sup>1</sup>The health educator at the University is giving some health training to teachers.

104. Faculty personnel should be enlarged in harmony with the growth of the University and the needs of its Department of Health and Physical Education. Additions to the department should include a dentist and a psychiatric social worker to work in close cooperation with the Bureau of Mental Hygiene.

105. The present program should be expanded and developed in harmony with growth in the University enrollment.

106. Teachers College health education programs and provisions should be reviewed by the Teacher Education Coordinating Committee (a committee composed of personnel from the University of Hawaii and Department of Public Instruction) in collaboration with such agencies and groups as the Department of Health and the Public Health Committee of the Chamber of Commerce.

107. Further health education workshops should be conducted.

108. A health center for intermediate school should be established.

## **HEALTH INSTRUCTION, SERVICES AND PROGRAMS**

### **Recommendations for Immediate Action**

109. A health room adequate for the needs and purposes of the school should be provided in each school.

110. Measures should be instituted to remedy critical conditions of lighting, hearing, and physical education facilities.

111. Provisions should be made to secure the services of sufficient qualified personnel to aid in the proper planning, development and evaluation of the health and safety sections of the Hawaii Course of Study, 1944, for kindergarten through grade VI, and for the health and physical education work in grades VII to XII inclusive, so that an effective and adequate health course of study is made available to teachers.

112. More workshops and other means of in-service training in health education should be provided for teachers, under joint auspices of the Department of Public Instruction, Department of Health, University of Hawaii, Public Health Committee of the Chamber of Commerce, and other voluntary health agencies.

113. With the expansion of the program, additional personnel will be needed to provide an adequate program.

114. There should be provided beyond the pupil-teacher ratio: (a) full-time health workers in all the larger schools and (b) full-time health workers who will serve two or three of the smaller schools.

115. At least two additional audiometrists should be secured so that the hearing program may be developed further. Five or six would not be too many. A good testing program would give a hearing test to each pupil every two years starting with grade III.

116. Special teachers for the hard of hearing should be engaged in schools with programs already organized.

117. A follow-up program should be developed to provide medical services for children with hearing defects. This might be a cooperative venture by the Department of Public Instruction, Department of Health, and Medical Society.

118. The program embracing physical education and recreation should be expanded. Trained personnel in this field are badly needed to staff schools.<sup>1</sup>

119. Special projects, such as the summer schools for cleft palate children, should become a regular part of the health program for handicapped children and be handled either by the summer school session or by a visiting teacher holding speech correction sessions on each of the islands.<sup>2</sup>

120. Personnel and funds should be provided to establish work with speech handicaps as a regular program.<sup>3</sup>

121. Provision should be made for breakdown of the crippled children class into two classes with trained teachers and adequate facilities, as it is difficult for one teacher to handle the children effectively when the grade levels extend over such a wide span. Another teacher, preferably one with training with spastic children, should be secured. The class could then be divided into two groups; for example, grades 1-4 and 5-9.

122. Two visiting teachers should be made available for crippled children in Honolulu, as the greater number of cases are located there because of available medical and hospital services. One could take care of hospitalized cases and the other could handle the home-bound cases.<sup>2</sup>

123. Sight conservation classes in Rural Oahu and on Kauai should be re-opened when vision test findings warrant them.

124. Sight conservation classes on the secondary level should be established on Hawaii, Kauai and Maui if conditions justify.

125. Trained teachers should be secured as soon as possible for all sight-saving classes.

126. A demonstration program should be established using special teachers assigned to special work but included on the staff of two centrally located schools in Honolulu on elementary and secondary levels.

127. Speech correction classes in the Division of Health Education should be re-established with the employment of trained personnel to care for all children with defective speech, including stutterers, cleft palates, cerebral palsy, asphasias, stuttering dialectalisms, and infantile perseveration.

128. The present building in which the school for leprosy children is held should be renovated.<sup>4</sup>

### Long-Range Objectives

129. As soon as possible, attention should be given to the modernization of present buildings and definite planning of new school plants so as to provide facilities for proper conduct of the health program.<sup>5</sup>

130. As soon as possible, provision should be made for a territorial director of school housing (school architect) who would have direct supervision over school plans. It is further recommended that procedures now being used on

<sup>1</sup>See Draper-Hayden report, IV, Specific Recommendations, B, 7, c, item 2, 3, 4, page 24 and V, Summary and Recommendations, B, item 10.

<sup>2</sup>Recommendation presently in effect.

<sup>3</sup>The Department of Public Instruction is in the process of working out a program.

<sup>4</sup>Some added facilities and equipment have now been obtained.

<sup>5</sup>See preliminary Report on the Curriculum Survey of the public schools of the Territory of Hawaii by Edgar Draper and Alice Hayden, V, Summary and Specific Recommendations, J, School Buildings and the Development of a School Building Program, Sec. 2, 3, 4.

Kauai for the handling of school plants be carefully studied by the boards of supervisors on the other islands and extended to them, if possible.<sup>1</sup>

131. Continued study and attention should be given in Teachers College to the development of the health background and the stimulation of health consciousness of potential teachers by teacher-training work so that full preparation of novice teachers will be secured.<sup>2</sup>

132. Opportunities provided children in the special class should be extended to other areas in the Territory when such is indicated.

133. Hard of hearing classes should be established on each of the other islands as need is indicated.

134. Extension of speech correction classes should be made to all areas.

## PHYSICAL EDUCATION AND LEISURE ACTIVITIES

### Recommendations for Immediate Action

135. Physical education and education for leisure should be required by law as part of the school program and sufficient funds should be provided by the legislature to cover adequate administrative, supervisory and teaching staff in line with modern school practices.

136. An analysis should be made of the present status of facilities by specialists in this field and recommendations made for providing the minimum necessities in the way of facilities, including play fields, gymnasiums, swimming pools, tennis courts, craft shops, equipment and supplies.

137. Present facilities in each school should be made available to community groups during hours when schools are not in session.

138. A director of physical education and leisure activities, with the necessary specialized training and demonstrated ability in the field, should be appointed in the Department of Public Instruction to study the problem, to recommend steps for the development of an adequate program, and to promote it.

139. A syllabus should be provided by the Department of Public Instruction covering a course of study for all grades based upon local interests and needs, emphasizing physical fitness and leisure skills.

140. Time allotment for class instruction should be provided as part of the physical education program in all schools.

141. Programs should also serve adults as a phase of adult education.

### Long-Range Objectives

142. Provision should be made in the school code and regulations for a physical education program to serve all pupils in grades I to XII inclusive.

143. A school architect should be provided as a member of the department staff to determine policies, to advise, and to guide in the provision of school facilities.

144. An advisory group of specialists in physical education and recreation should assist in the planning of facilities and advise on designs from the standpoint of most effective use.

<sup>1</sup>For a long-range view of this problem of curriculum improvement, see Draper-Hayden Survey, Section IV, Recommendations Concerning the Organization and Development of a Curriculum Improvement Program in the Territory.

<sup>2</sup>See Draper-Hayden report concerning similar recommendations. IV, Specific Recommendations. B, Recommendations Concerning the Department of Public Instruction. 2, b, 7, Territorial Supervisor of Physical Education and Health. 5, b, 4, Director of Work with Handicapped Children. 6, A field worker in the area of physical education and health. V, Summary and Specific Recommendations, page 58, item 6.

145. Future school plants should be designed to serve the community with layouts so arranged as to prevent interference between school and other programs.

146. An adequate supervisory staff on territorial and county levels should be appointed to guide and assist in the development of the program.

147. Standards for certification of personnel in the field of physical education and leisure activities should be established as a basis for the selection of leadership.

148. A recreation council composed of directors and supervisors of the program in the schools and those in recreation departments in the various counties should be formed to coordinate the various programs so that each will supplement the works of the other department and serve the public most effectively.

## MENTAL HYGIENE

### Recommendations for Immediate Action

149. The staff of the Division of Pupil Guidance, Department of Public Instruction, should be augmented by the following additional personnel:

#### Supervisors (4)

Oahu .....	2
Hawaii .....	1
Molokai, Maui, Kauai.....	1

#### Clerk (1)

Counselors — increase from 14 to 69 as follows:

Oahu .....	38
Hawaii .....	16
Molokai, Maui, Kauai.....	15

150. An advisory committee on extending in-service training for school counselors should be appointed.

151. Since any technique that embraces all areas involving interests of several agencies should have a sound basis of mutual understanding and support, the Pratt-Jacobson program should be evaluated by expert authorities in mental hygiene and education at a national level outside of Hawaii.

152. A full-time director and a full-time assistant director should be provided for the Bureau of Mental Hygiene;<sup>1</sup> also a mental hygienist should be provided to work with the Territorial Society for Mental Hygiene, the schools, and industry, and on an adult level.

153. In the child-guidance clinic, at least one more full-time psychiatric social worker should be provided, making a total of two; one additional clerk should be provided, making a total of two; also, a full-time mental hygienist (not necessarily a psychiatrist) should be employed to do educational work regarding children in the community. This latter person should be active in preparing educational materials.

154. The Psychological Clinic should assume a share of responsibility in teaching courses at the University of Hawaii, particularly Teachers College.

### Long-Range Objectives

155. There is need for full-time counselors in elementary schools as much as in high schools. One counselor should serve more than one school if enrollment falls below 500.

<sup>1</sup>Recommendation presently in effect.

156. The Division of Pupil Guidance should have authority in recommending appointment of counselors.

157. To meet the standard of one full-time counselor to 500 school population, a total of 138 counselors will be needed.

158. When the schools have the recommended number of full-time counselors attendance cases should be under their supervision. No separate appropriation should then be necessary for attendance work.

159. There should be more outpatient service and more educational work in the overall mental hygiene field.

160. Ultimately the psychological service within the Bureau of Mental Hygiene should be under the administration of the Territorial Department of Health instead of its present status under the Psychological Clinic on loan to the Department of Health.

161. It would seem that the Psychological Clinic service should be more closely integrated with other aspects of study and diagnosis of individual problems. Like social and psychiatric evaluation, it is a part of the total evaluation, and should not be separated.

## PUBLIC SCHOOL CAFETERIA PROGRAM

### Recommendations for Immediate Action

162. New cafeterias at Manoa Housing, Naval Housing, Hamakuapoko, Keakealani, and Riverside Schools should be constructed.

163. Facilities in certain schools (Kaimuki High School, Leilehua, Palolo, Puunene, Kamehameha III, Molokai High and others) should be expanded.

164. Schools having sufficient funds should be requested to purchase needed equipment items. Additional stoves, refrigerators, and labor-saving equipment such as dishwashers, mixers, and so forth, should be provided as funds become available.

165. Cafeteria assistants' salaries should be paid from territorial funds.

166. A pre-service and in-service program for cafeteria assistants should be set up.

167. Milk should be made available to all schools.

168. In so far as possible, each school should grow fruits and vegetables to supply the school cafeteria.

169. An advisory committee should be organized to develop plans for furthering the school health program by the use of the school cafeteria as an educational medium.

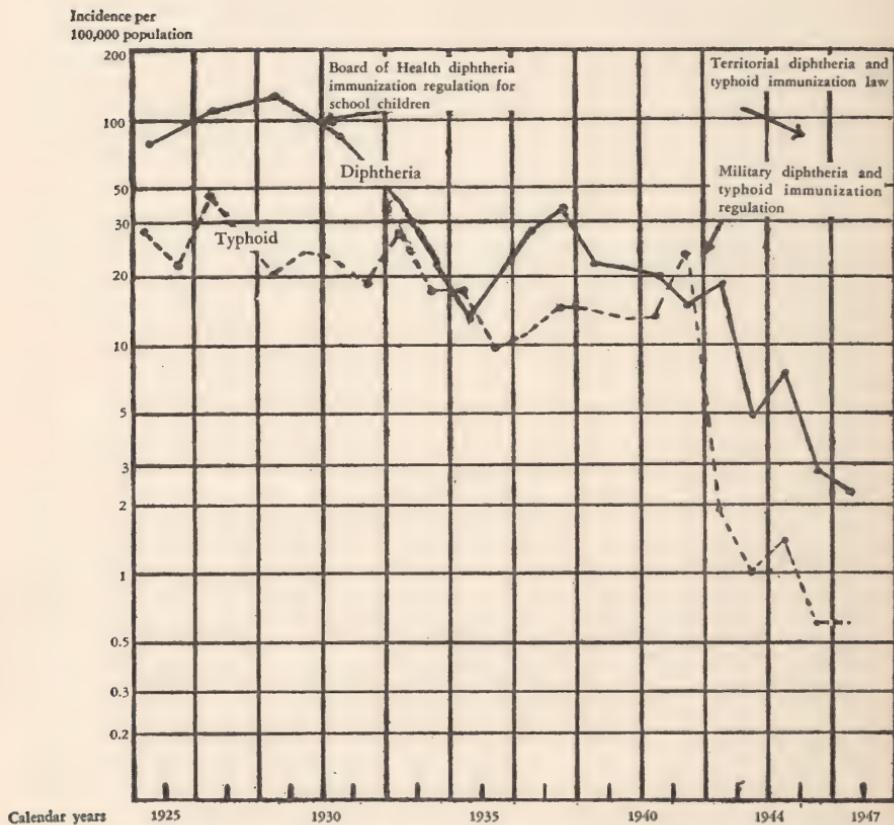
### Long-Range Objectives

170. Cafeteria service should be provided for all schools not having cafeteria programs (4 on Oahu; 11 on Maui; 6 on Kauai; and 8 on Hawaii).

171. Additional funds for purchase of needed equipment should be included in the budget.

172. Facilities and personnel should be extended so that every child in the public schools (about 80,000) may be provided with a hot lunch daily.

173. An architect should be assigned to the Department of Public Instruction for the purpose of planning school plants, including cafeterias.



Incidence Rate of Diphtheria and Typhoid  
Territory of Hawaii, 1925-1947\*

\*Fiscal years ending June 30th.

Source: Bureau of Epidemiology, Territorial Health Department.

## COMMUNICABLE DISEASE CONTROL

Communicable disease control is one of the oldest of public health activities. Many of the methods of control have long been known: isolation, quarantine, disinfection, destruction of intermediate hosts and immunization. Diseases for which specific prophylactic measures have been discovered—typhoid, diphtheria, smallpox—have dramatically fallen from their former high incidence. Continuing research, accompanied by community education and new legislation designed to minimize the cultural lag which often hinders full realization of the benefits of scientific advances, promises future progress in control.

Communicable disease control in the Hawaiian Islands roughly parallels that of the mainland. Because of local conditions—climate, topography, geographic position, insect life, composition and customs of the population, social enlightenment and overall economy—certain types of illness constitute more of a problem in some areas than in others. Hawaii, because of its tropical setting in relatively close proximity to the Orient, might reasonably be expected to suffer maladies unknown to most mainland communities. Except for plague and dengue fever, however, Hawaii's differences have been more those of degree than of kind. Even such spectacular events as the quarantine of Honolulu during the plague epidemic of 1900 have had their counterparts in cities of the continental United States. Unlike most other areas, the Islands benefit from compulsory immunization and vaccination. Such procedures, decreed by territorial law, have been a major factor in the drastically reduced incidence of diphtheria, smallpox and typhoid.

The committee confined itself for the most part to three specific diseases, with only incidental mention of others. Two of the three, tuberculosis and leprosy, were studied because of their high local incidence rate in comparison with many mainland communities. Furthermore, tuberculosis is undoubtedly the outstanding communicable disease problem in Hawaii. The third section was devoted to the venereal diseases, which, while curtailed in the Territory, nevertheless constitute a continual threat. General aspects of the problems of communicable disease are also treated in the report. Other forms of contagious illness, such as malaria, yellow fever, yaws and cholera, have appeared in the Islands rarely or never, so that the committee felt justified in giving them little or no discussion.

Of the three types studied in the report, tuberculosis has the highest Hawaiian mortality rate. Only a few states find this disease more serious than does the Territory. Consequently, major emphasis must be placed on tuberculosis control measures, including case-finding through chest x-rays, hospitalization of infectious cases, and rehabilitation of treated persons.

Leprosy constitutes a different kind of problem. Although deaths from this cause occur more frequently in the Territory than in the entire continental United States (29 local deaths, against 24 mainland deaths in 1944), absolute incidence remains almost negligible. Furthermore, a definite downward trend

is noted in the occurrence of leprosy. Kalaupapa Settlement, on Molokai, is devoted exclusively to leprosy patients.

The venereal diseases, while not as great a problem in the Islands as in most states, still require constant vigilance. Absolute, if not relative, incidence remains high, and such diseases can spread rapidly in any community.

The original study, embracing reports on general aspects of control and the three types of disease mentioned above, was published in September 1947 under the title *Communicable Disease Control, Territory of Hawaii*. Readers interested in the overall background on which the recommendations which follow were based are referred to this original volume.

## GENERAL ASPECTS

### Recommendations for Immediate Action

1. A booster diphtheria injection should be required of all children prior to entering school.
2. The Department of Health should conduct an educational program urging more widespread voluntary immunization against pertussis (whooping cough).
3. All milk and milk products utilized in the Territory should be pasteurized.
4. Further study should be made of the water supply at strategic points of consumption to determine the needs for continuous chlorination.
5. Rheumatic fever should be added to the list of reportable diseases in the Territory.<sup>1</sup>
6. Efforts should be made to encourage prompter and more thorough reporting of all cases of reportable diseases by physicians to the Department of Health.
7. The Department of Health staff should be augmented by a technician qualified to do diagnostic tests on tropical diseases and to initiate limited types of research in this field.
8. The United States Public Health Service should station a medical entomologist in Honolulu working at all times on insect problems.
9. Regulations pertaining to adequate rat-proofing measures should be strictly enforced in the Territory.
10. All physicians should be encouraged to report immediately any cases suspected of having typhoid, typhus, diphtheria, scarlet fever, poliomyelitis, smallpox, plague, food poisoning outbreaks and dengue fever; and the confirmation of these suspected cases should be the responsibility of the Bureau of Communicable Diseases, Territorial Department of Health.
11. Hospitals should accept the responsibility of caring for cases of communicable diseases during an epidemic.
12. Emergency epidemic or disaster control teams should be established under the direction of the Territorial Department of Health.
13. The government physician's function should be one of public health and not therapeutics unless his geographic situation makes it mandatory.
14. The year's residence clause for licensure to practice medicine should be repealed.

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<sup>1</sup>Recommendation presently in effect.

## Long-Range Objectives

15. A combined diphtheria-tetanus toxoid should be used as an immunizing agent.<sup>1</sup>
16. The University of Hawaii should establish an institute for research in tropical diseases.
17. The care and treatment of indigents should be the responsibility of the Department of Public Welfare.

## TUBERCULOSIS

### Recommendations for Immediate Action

1. Effective methods should be devised by responsible agencies for the control of dangerously infective recalcitrant tuberculous patients.
2. The Territorial Department of Health should provide the services of a qualified medical epidemiologist and adequate statistical staff in the Bureau of Tuberculosis Control.
3. All admissions to the general hospitals, and all groups in which a high incidence of tuberculosis occurs (such as prenatal patients) should be routinely x-rayed.
4. A medical social service program should be developed in connection with the Honolulu Chest Clinic, this service to be coordinated with the social service department of Leahi Hospital.<sup>1</sup>
5. Emphasis should be placed on educating physicians in private practice with regard to the value of chest x-rays and to the availability of consultation services through the Honolulu Chest Clinic.
6. The health education programs of the Territorial Department of Health and Territorial Tuberculosis Association should be expanded.
7. Consideration should be given to establishing a pneumothorax clinic at the Honolulu Chest Clinic.
8. Public welfare regulations should be modified and provision made for necessary funds for the adequate relief of tuberculous individuals and their families.
9. A plan should be evolved under sponsorship of the Territorial Tuberculosis Association for the establishment of a rehabilitation program centralized at the Honolulu Chest Clinic, for such tuberculous patients as are not included under the rehabilitation program at Leahi Hospital.
10. Permanent modern-type buildings should be constructed at Leahi Hospital to augment and eventually to replace obsolete non-fireproof pavilions to a total hospital capacity of approximately 900 patients.
11. Leahi Hospital should maintain an adequate number of beds for the hospitalization of tuberculous persons and facilities should be modernized to provide most up-to-date treatment.
12. Additional personnel for works under construction and to fill existing vacancies for the biennium of 1947-1949 at Leahi Hospital should include: 4 administrative; 7 medical; 2 assistant directors of nursing staff, 33 registered nurses, 19 practical nurses/nurses' aides; 2 technicians; 2 registered therapists; 2 medical

<sup>1</sup>Recommendation presently in effect.

social workers; 2 dietitians; 25 kitchen staff; 6 laundry helpers; 7 maintenance and repair staff; 1/2 for motor services; 13 orderlies; 8 for miscellaneous services.

13. Public health nursing assistance should be provided in clinics and in the field, as liaison between Leahi Hospital and the Department of Health.

14. A two-to-four months' educational program in tuberculosis nursing should be offered to all registered nurses in the Territory.

15. Leahi Hospital should cooperate with the Department of Public Instruction and nurses' associations in developing a central school for training practical nurses.<sup>1</sup>

16. The main building at Leahi Hospital should be enlarged to provide additional administration, clinical, surgical and medical facilities to meet present needs.

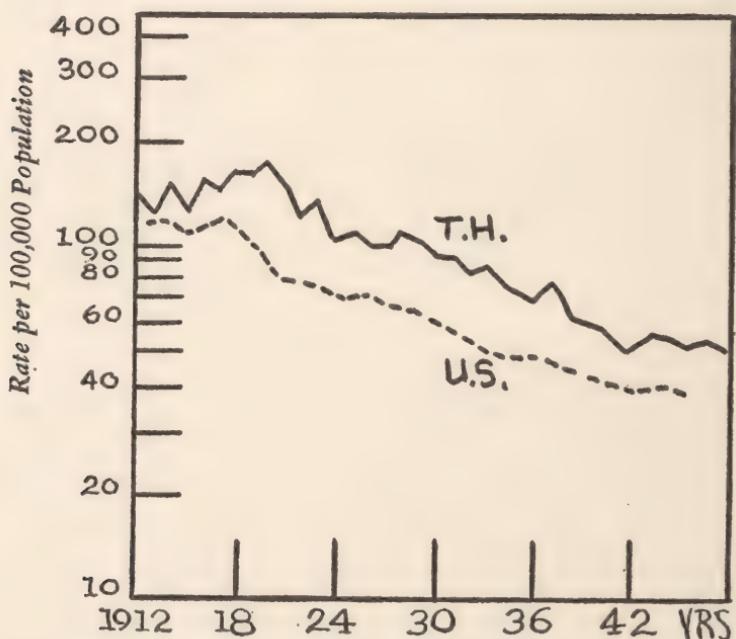
17. Wooden ward pavilions at Leahi Hospital should be replaced by modern fireproof construction.<sup>2</sup>

18. Additional nurse dormitory facilities at Leahi Hospital should be constructed.

19. A new power plant should be constructed at Leahi Hospital and present structure should be converted into maintenance shops.

#### Long-Range Objectives

20. Study should be made of existing laws and regulations regarding tuberculosis control here and elsewhere and revision made in accordance with the



Tuberculosis Mortality, United States and Hawaii, 1912-47

Source: Annual Report of the Board of Health, T. H., 1947.

<sup>1</sup>School for training practical nurses established in October 1947.

<sup>2</sup>Two semi-permanent ward buildings (240 beds) have been completed.

best available pattern.

21. The tuberculosis control program should be expanded ultimately to include the mass x-ray survey of all persons over 15 years of age residing in the Territory of Hawaii; and machinery should be established for resurveying the population at definite intervals.

### LEPROSY

#### Recommendations for Immediate Action

1. The United States Public Health Service Leprosy Investigation Station should be reestablished.

2. Additional staff quarters should be constructed at Kalaupapa Settlement.

3. The United States Public Health Service should provide a resident physician and laboratory technician (full-time basis) to Kalihi Hospital.

4. All natives coming from Asiatic and South Pacific countries should be carefully screened by Department of Health authorities in cooperation with the physicians of the Board of Hospitals and Settlement.

5. Radio talks should be given and other educational materials prepared under direction of authorities in the field of leprosy and disseminated to the public.

#### Long-Range Objectives

6. X-ray and other laboratory equipment should be installed at Kalihi Receiving Station.

7. Present plans and suggestions for improvement of Kalaupapa Settlement and Kalihi Hospital should be carried out as funds and opportunity avail.

8. All school physicians and nurses in the Territory should be given specific instructions in detecting early juvenile cases of leprosy.

9. A specific rule regarding prophylaxis might be preferable to a policy of judging each case on its own merits.

10. A health museum should be established in Honolulu under sponsorship of the Public Health Committee of the Chamber of Commerce and other interested groups, in which leprosy can be presented as a phase of a general health education program.

### VENEREAL DISEASE

#### Recommendations for Immediate Action

1. More emphasis should be given to venereal disease education by the Bureau of Health Education, Territorial Department of Health.

2. Physicians should be encouraged to take blood tests routinely for physical examinations unless contra-indicated.

3. All hospitals should require blood tests of new admissions.

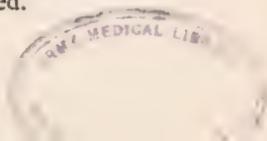
4. Medical care programs in industry should include venereal disease control.

5. The Department of Health should intensify its efforts to encourage all physicians to report all cases of venereal disease and make reporting as simple as possible.

6. Prophylactic policies of the armed forces should be continued.

#### Long-Range Objective

7. If at any time a major subdivision of preventative medical services is set up within the administrative structure of the Territorial Department of Health, a venereal disease control program should be included.



## SPECIALIZED EDUCATIONAL PROGRAMS

The sixth volume of the Postwar Planning Committees on Health, entitled *Planning for Health through Community Health Education, Social Hygiene, Mental Hygiene and Nutrition*, was published in December 1947. It consists of a discussion of the role of health education followed by three specific applications of educational principles. It was realized from the beginning that the success of programs in social hygiene, mental hygiene and nutrition must be dependent in large measure upon the corresponding educational programs.

The significance of each of the four topics treated in this volume is recognized in both the Territory and the mainland. In several cases local measures are merely duplicates of those necessary in other cities. Other problems have unique local aspects, as, for example, in the case of island food habits.

Many public health leaders have expressed opinions to the effect that "public health advances about as fast as public opinion." Consequently, the importance of area-wide education as to what can be done in the way of organized community effort and individual application with regard to scientific advance in the field of health becomes obvious. The study committee surveyed local agencies and techniques currently or potentially of use in this function.

Hawaii's recent record in the field of social hygiene is an enviable one. Keeping the record good and bringing about further improvement require constant vigilance. Special problems are indicated in sex education, marital and family relations, counseling and repression of prostitution.

The mental stress and strain of modern living, with accelerated means of communication and speedy machines, have augmented the ever-present need for proper mental hygiene services. The fact that more than one half of the hospital beds in the United States are occupied by mentally ill persons is indicative of the magnitude of our mental health problems, and these problems are to be found in Hawaii to as great an extent as elsewhere in our country. The committee's report summarizes the recommendations of a study made in 1937 and consequent developments that have occurred locally in the field of mental hygiene. Many of the needs pointed out in the earlier study are still unmet and others have arisen. These needs have elicited further recommendations, which are set forth below.

The high cost of food today, as well as the scarcity of certain food items, makes the planning of diet an essential economic as well as an essential health factor. It has been proved time and again that the type of food we eat is of vital importance in furthering our resistance to disease and the maintenance of optimum well being.

### COMMUNITY HEALTH EDUCATION

#### Recommendations for Immediate Action

1. In order to conduct an unified, coordinated and total community health education program, the Department of Health and the Department of Public Instruction should assume the leadership and responsibility for guiding an over-all community health program, and the Oahu Health Council should serve as a

coordinating agency. Representatives of the Department of Public Instruction, the Department of Health and the Oahu Health Council should meet several times in the year to study progress and coordinate the total picture.

2. The health education activities of the Territorial Department of Health should be centralized in the Bureau of Health Education and the activities of this bureau should be enlarged to make possible the development of a more comprehensive territory-wide program.

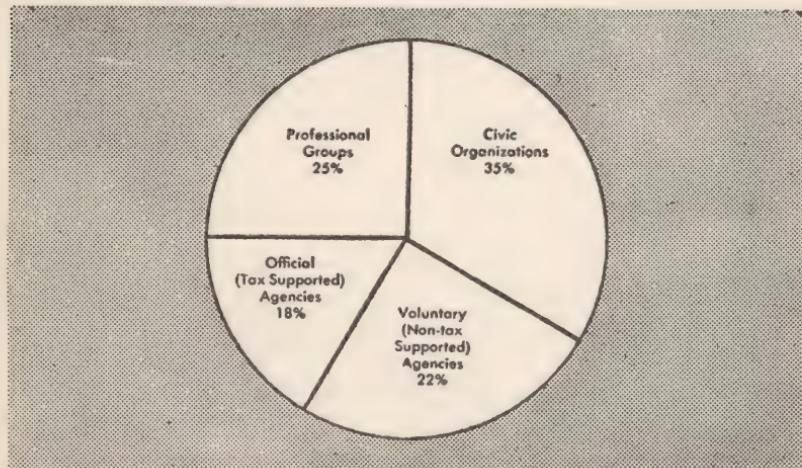
3. The present in-service training program of the Department of Health should be continued and expanded.

4. A planned, coordinated total community health education program, under the joint auspices of official and voluntary agencies, should be conducted on a demonstration basis, within a limited area.

5. Both official and voluntary agencies should obtain and use more health films.

6. Workshops, institutes or conferences on community health education techniques should be conducted annually as special projects or as the theme for annual meetings. Such workshops should be sponsored by the University of Hawaii in cooperation with other agencies and conducted under the leadership of specialists in the field of health education.

7. The Oahu Health Council should be utilized as a clearing-house for dissemination of information between agencies.



Composition of the Oahu Health Council, 1947

One of the Territory's leading educational forces

Source: Health Story, p. 50

### Long-Range Objectives

8. Any agency employing staff personnel in the field of health education should use as a guide for selection the American Public Health Association's recommendations for "Educational Qualifications of Health Educators," prepared by the Committee on Professional Education.

9. Scholarships should be provided by agencies interested in health promotion for graduate training of qualified local persons in the field of health education. Recipients of such scholarships should be required to take an additional internship of 3 to 6 months in the Territory, under the supervision of trained health educators.

10. A health museum should be established in Hawaii.

11. Consideration should be given by agencies to possible exchange of personnel between mainland and island organizations.

12. Materials and methods of health education in use in the Territory should be studied and evaluated.

13. School health chairmen should have special training and aptitude for their positions and be full-time employees.

## SOCIAL HYGIENE

### Recommendations for Immediate Action

1. A statute should be enacted to define prostitution broadly enough to include "not only giving or receiving the body for sexual intercourse for hire but also the giving or receiving the body for indiscriminate sexual intercourse, without hire." Further, the terms "lewdness" and "assignation" should be re-defined.

In addition, it should be unlawful:

- a) To offer, or offer to secure another for the purpose of prostitution, or for any other lewd or indecent act.
- b) To receive, or offer or agree to receive any person into any place, structure or vehicle, etc., for the purpose of prostitution, lewdness or assignation, or permit any person to remain there for such purpose.
- c) Knowingly to accept, receive, levy or appropriate any money or other thing of value, without consideration, from a prostitute or from the proceeds or earnings of any woman engaged in prostitution.
- d) To engage in prostitution, lewdness or assignation.
- e) To solicit, induce, entice or procure another to commit an act of lewdness, assignation or prostitution with himself or herself.
- f) To reside, enter, or remain in any place, structure, vehicle, etc., for the purpose of prostitution, lewdness or assignation.
- g) To aid, abet or participate in the doing of any of the acts enumerated.

2. More attention should be given in the law-enforcement program to promiscuous girls and women and to taxi drivers as procurers.

3. More attention should be given to the development of a continuous comprehensive community social-hygiene program in the Division of Public Health Education of the Department of Public Instruction.

4. These study groups should be extended to other schools as interest is evidenced.

5. Attention should be paid to the area of health and human relations by official curriculum preparation and planning groups so that a carefully worked out curriculum may be prepared and extended from the kindergarten through the senior high school.

6. The University of Hawaii should plan to cover social hygiene in the teacher-training program and to assist with the in-service training of teachers in the field.

7. More attention should be given by those agencies concerned with child welfare to the preventive and remedial aspects involved in sex delinquencies.

8. Adequate staffing of the vice squad should be undertaken, when personnel are available, particularly with regard to those assigned to the prostitution repression program.

9. An organized, adequately supervised, community recreational program for all age groups should be instituted by the Board of Parks and Public Recreation and interested voluntary agencies. Neighborhood social centers should be developed, and the teen-age canteen movement be extended, either by official or voluntary agencies.

10. Attention should be given to strengthening the programs and volunteer leadership of all these agencies; and greater emphasis should be placed on character-building programs.

11. As the follow-up agency seems logically to be the Social Protection Committee of the Honolulu Council of Social Agencies, this committee should be expanded in its membership to include all agencies, public and private; and the scope of action should be enlarged to cover not only the narrow phase of social protection but all recommendations submitted in this committee report.

12. The Health Education Committee of the Oahu Health Council and the Social Protection Committee, Honolulu Council of Social Agencies, should cooperate in sponsoring a year-round social hygiene program, with special emphasis upon Social Hygiene Day.

### **Long-Range Objectives**

13. Urban redevelopment should be planned with a view toward improving the overall environment of the individual, thereby encouraging the development of healthy attitudes in matters relating to social hygiene.

14. Local school, park and playground facilities should be improved and extended by the various responsible agencies, such as the Board of Parks and Public Recreation, the City Planning Commission, and the Department of Public Instruction. Provision should be made for adequately trained and paid supervisory personnel.

## **MENTAL HYGIENE**

### **Legal Aspects<sup>1</sup>**

1. Needed changes in existing statutes should be made and other necessary legislation relative to mental health should be secured.

2. A review of proposed legislation which has been undertaken by the Committee on Psychiatry and Neurology of the Hawaii Territorial Medical Association with the cooperation of the Territorial Society for Mental Hygiene, Territorial Department of Health, the Department of Institutions, the Psychological Clinic of the University of Hawaii, and the Public Health Committee of the Chamber of Commerce of Honolulu should be continued and enlarged upon.

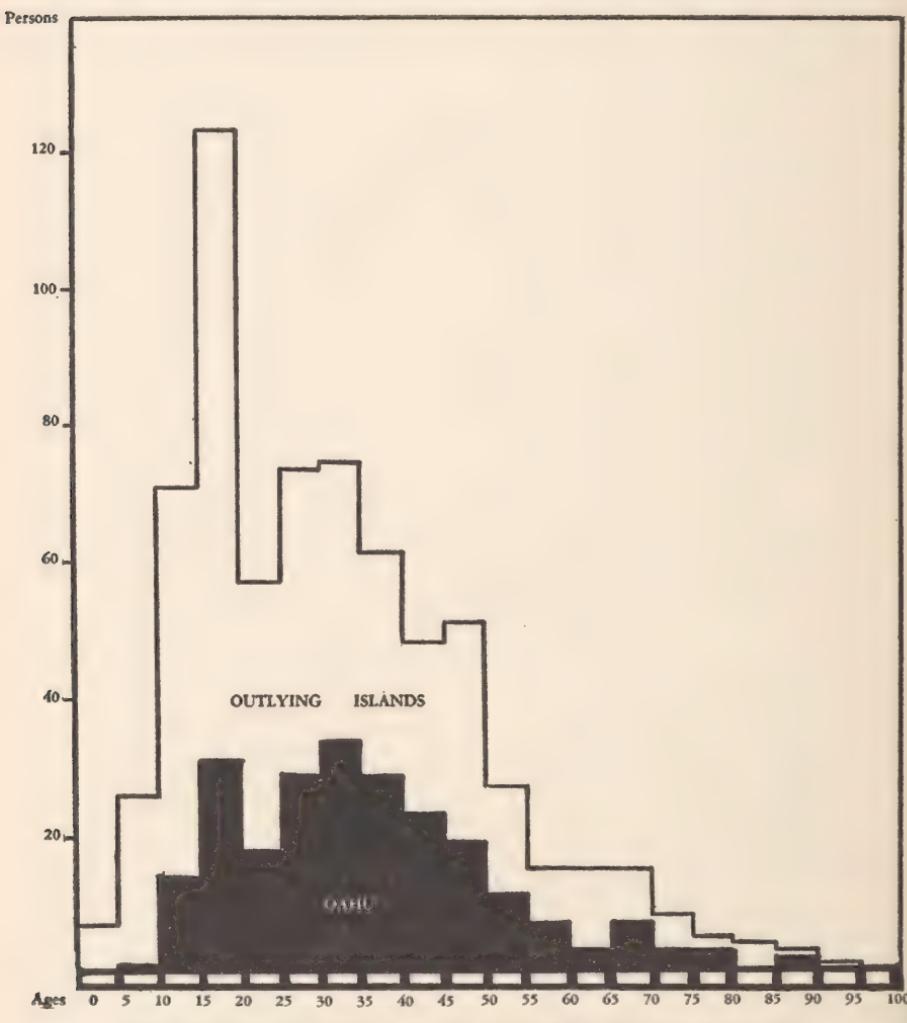
<sup>1</sup>Only recommendations for immediate action were specified by the committee in this area.

**Territorial Department of Health, Bureau of Mental Hygiene**  
**Recommendations for Immediate Action**

3. A full-time assistant director should be provided for the Bureau of Mental Hygiene.<sup>1</sup>

4. Two full-time mental hygienists should be employed to do education work in the community, the first to work primarily with schools, parents and agencies in the field of child guidance, the second to work with adult groups in industry, etc.

5. The mental hygiene program on the other islands should be expanded.



Source: *Annual Report of the Board of Health, T. H., 1947.*

<sup>1</sup>Recommendation presently in effect.

### *Long-Range Objective*

6. The psychological service within the Bureau of Mental Hygiene should be under the administration of the Territorial Department of Health instead of under the Psychological Clinic and loaned to the Department of Health.

### **General Hospitals<sup>1</sup>**

7. The facilities and services of the Psychiatric Unit of Queen's Hospital should be expanded in order to care for a larger number of acutely ill patients.

8. Small mental hygiene units should be established in general hospitals on other islands to provide emergency treatment until patients can be transferred to Oahu.

### **Department of Institutions<sup>1</sup>**

9. An assistant director in charge of medical activities should be employed.

10. A central file system and punch-card system should be inaugurated.

11. Consideration should be given to the possible establishment of a well-staffed psychopathic hospital in Honolulu for intensive treatment of acute cases of mental illness, such a unit to serve as a training center for psychiatric and related services.

12. Adequate treatment facilities should be provided for alcoholic patients.

13. The problem of treatment and institutionalization of psychopaths should be given careful study. At present many psychopaths are committed to criminal institutions.

14. Inservice training programs should be set up for the staffs of all institutions.

### **Territorial Hospital**

#### *Recommendations for Immediate Action*

15. Additional personnel should be provided in nursing, occupational therapy, psychiatric social work and stenographic services.

16. Diagnostic and treatment service should be extended.

17. The programs of follow-up work with convalescents should be expanded, particularly on outlying islands.

18. Consideration should be given to more extended use of family care for patients.

19. Non-acceptable beds should be replaced and sufficient additional beds be provided to meet the needs of the population.

20. Fire hazards should be removed.

21. Adequate facilities should be provided for tuberculous patients.

### *Long-Range Objectives*

22. The standards of the American Psychiatric Association should be met.

23. An affiliated nursing service should be established with the training schools of The Queen's and St. Francis hospitals to provide training in psychiatric nursing to students.

<sup>1</sup>Only recommendations for immediate action were specified by the committee in this area.

24. The public should be educated to a better understanding of the functions of the Territorial Hospital, with emphasis in such an educational program on treatment and rehabilitation services rather than on custodial care.

### **Waiale Training School for Boys**

#### *Recommendations for Immediate Action*

25. The Department of Institutions should designate a psychiatrist to examine, review and advise concerning the treatment of every boy admitted to the training school.

26. The training school should be administered by trained and experienced personnel competent to initiate and put into practice a treatment, rehabilitation and training program.

27. The program should be revamped. It should be flexible to meet the needs of different groups; *i.e.*, the younger groups needing crafts and academic work; older groups, self-maintenance, reforestation and continual schooling. (Funds are necessary; one-quarter million dollars is now available for a new plant.)

28. New types of cottages should be constructed.

29. House-parents should be placed in all cottages.

30. Segregation of younger groups should be provided.

#### *Long-Range Objectives*

31. Vocational guidance should be provided boys in the training school.

32. Further consideration should be given the present plan to transfer 16-year-olds to Hawaii on a reforestation project.

33. Provision should be made in the law to transfer selected 16- to 20-year-olds from prison to industrial school.

### **Kawaiola Training School for Girls**

#### *Recommendations for Immediate Action*

34. The Department of Institutions should designate a psychiatrist to examine, review and advise concerning the treatment of every girl admitted to the training school.

35. Realistic standards should be maintained relative to work in keeping with the girls' abilities.

36. More satisfactory arrangements should be made for the medical and social care of pregnant girls and their infants.

37. An additional dormitory should be provided.

38. Ages 12 to 16 should be segregated from the older group.

#### *Long-Range Objectives*

39. Vocational guidance should be provided girls in the training school.

40. Education programs for girls should be expanded to include services in keeping with the needs of all girls.

41. The same kind of physical plant should be provided as that planned for the training school for boys.

## Waimano Home

### *Recommendation for Immediate Action*

42. Under the present set-up this hospital should have a medical superintendent, a total of 110 hospital attendants, at least one additional academic instructor, one additional arts and crafts instructor, a part-time neurological consultant, one full-time dentist, one full-time dental hygienist, and a total of 12 nurses. It is expected that supervisors would be responsible for inservice training of attendants. The present position of superintendent should be reclassified to business manager.

### *Long-Range Objectives*

43. Standards of the American Association for the Feeble-minded should be met.

44. An expanded training program suited to the capacity of patients should be provided.

45. The academic classes should be used to provide opportunities for field training for student teachers in the area of the education of mentally retarded children.

## Oahu Prison

### *Recommendations for Immediate Action*

46. A prison industries administrator should be employed.

47. Effort should be made to expand and improve psychiatric diagnostic service.

48. Study should be given to the problem of treatment of criminal psychopaths.

49. Adequate facilities and services for medical rehabilitation should be provided.

50. Effort should be made to supply a constructive work program for all prisoners.

51. The proposed plan to move the prison to Kulani, Hawaii, should be activated if found feasible.

### *Long-Range Objectives*

52. Personnel should approach the standards set by the American Prison Association.

53. Prison industries should include crafts, mechanics, adult education, agriculture and industrial training.

## Board of Paroles and Pardons<sup>1</sup>

54. Prison administration should be responsible for paroles and pardons.

## Mental Hygiene Society<sup>1</sup>

55. Continued efforts should be made to educate the public regarding the nature, prevention and treatment of mental illness.

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<sup>1</sup>Only a recommendation for immediate action was specified by the committee.

## Psychological Clinic of the University of Hawaii

### *Recommendation for Immediate Action*

56. The Psychological Clinic should assume a share of responsibility in teaching courses at the University of Hawaii, particularly at the Teachers College.

### *Long-Range Objectives*

57. A social worker should be added to the staff.

58. This service should be more closely integrated with other aspects of study and diagnosis of individual problems.

## Department of Public Instruction

### *Recommendations for Immediate Action*

59. The division of Pupil Guidance staff should be augmented by the following additional personnel:

#### Supervisors (4)

Oahu .....	2
Hawaii .....	1
Molokai, Maui and Kauai.....	1

#### Clerks (1)

Counselors—increase from 17 to 84 as follows:

Oahu .....	50
Hawaii .....	16
Molokai, Maui and Kauai.....	18

60. An advisory committee on extending inservice training should be appointed.

61. The Pratt-Jacobson program should be evaluated by authorities from outside the Territory who are outstanding in mental hygiene and education fields.

### *Long-Range Objectives*

62. Full-time counselors should be provided for elementary schools as well as high schools. One counselor should serve more than one school if the population of one falls below 500.

63. The Division of Pupil Guidance should have authority in recommending appointment of counselors.

64. To meet the standard of one full-time counselor to 500 school population, a total of 168 counselors should be employed.

65. When schools have the recommended number of full-time counselors attendance cases should be under their supervision. No separate appropriation would then be necessary for attendance work.

## Juvenile Court and Crime Prevention Bureau

### *Recommendations for Immediate Action*

66. One case work administrator, one psychiatric social worker qualified to do inservice training, 2 probation officers and 3 detention assistants should be added to the staff of the Juvenile Court.

67. Consideration should be given to enlarging the staff complement of the Crime Prevention Bureau.

68. Educational work regarding juvenile delinquency should be extended both in the schools and in the community.

#### *Long-Range Objectives*

69. A boys' wing for the Detention Home Unit should be constructed. The planning architect should work with the chief probation officer in planning all new construction and obtain his approval of the final draft in order that these buildings be functional. Property is now available for construction.

70. Closer cooperation between the Crime Prevention Bureau, Juvenile Court, and social agencies should be encouraged. This could be facilitated by more frequent consultation service between various agencies serving the individual child.

#### **Child and Family Service<sup>1</sup>**

71. A study home should be established where children presenting serious behavior problems can be cared for and studied on a 24-hour basis for a period sufficient to permit sound planning for their reeducation. This study home would be under the management of the Child and Family Service.

### **NUTRITION Official Agencies**

#### *Recommendations for Immediate Action*

1. Two additional nutritionists should be employed for Kauai and Oahu.<sup>2</sup>

2. A nutritionist with special training and experience in the field of industrial health should be employed by the Territorial Department of Health, under the supervision of the consultant nutritionist.

3. Establishment of a Bureau of Nutrition in the Territorial Department of Health should be accomplished.

4. A home management consultant should be added to the staff of the Department of Public Welfare to insure better nutrition to clients through assistance both to workers and clients in budgeting, selection and preparation of foods.

5. The Division of Health Education of the Department of Public Instruction should be enlarged to include a specialist in nutrition education, who would aid the classroom teachers with facts and teaching materials as well as furnish consultation in curriculum planning.

6. A nutrition workshop should be sponsored jointly by the Department of Public Instruction, University of Hawaii Summer Session, and the Territorial Department of Health. It is further recommended that this workshop be conducted largely by field workers and selected classroom teachers.

7. An Institutional Food Manager should be added to the administrative staff of the Department of Institutions, who would supervise and coordinate food service in all institutions.

8. Courses of pre-service and inservice training for teachers and social workers, to include an adequate knowledge of basic nutrition, should be considered for the University of Hawaii.

<sup>1</sup>Only a long-range objective was specified in this case.

<sup>2</sup>Recommendation presently in effect.

### *Long-Range Objectives*

9. As soon as possible, territorial funds in sufficient amount should be provided the Department of Health for the salary and other expenditures of the nutrition services.
10. The budgetary items for all nutrition services, including salaries, should be an integral part of the biennial budget requested of the Territory by the Department of Health.
11. The Territorial Department of Health should inquire into the possibilities of sponsoring a demonstration diagnostic nutrition clinic conducted by a United States Public Health Service medical officer specializing in the field of nutrition. This clinic should be held primarily for physicians, nurses and educators to demonstrate techniques for appraising nutritional status of children and to give some of the newer knowledge relative to dietary requirements in promoting better nutrition status.

### **Voluntary Agencies**

#### *Recommendations for Immediate Action*

12. Voluntary agencies should be encouraged to make use of available community nutrition guidance resources to assist their clients toward improved health through better food choices.
13. The Red Cross supplementary nutrition educational program should be continued in cooperation with official and voluntary agencies.
14. The territory-wide advisory and coordinating functions of the Territorial Nutrition Committee should be continued.

### *Long-Range Objectives*

15. The Council of Social Agencies should consider the employment of a home management consultant to give consultation service and guide workers so that they may assist clients toward adequate nutrition budgeting and food preparation.
16. A nutrition educational campaign, specifically directed to workers within industry, should be inaugurated. It is further recommended that planning of in-plant feeding should be expanded.

### **Special Problems<sup>1</sup>**

17. All agencies doing any food teaching should continue to stress the value and advantages of locally grown products. Encouragement also should be given to the continuance of home gardens.
18. Pasteurization of all milk should be encouraged.
19. Until such time as the production of fresh milk can meet the needs, the use of evaporated and dried milk should be encouraged.
20. Adequate cooking facilities, refrigeration, and storage space should be emphasized in new housing.
21. Guidance should be given all groups whose diet has been affected because of unavailable foods and similar circumstances.

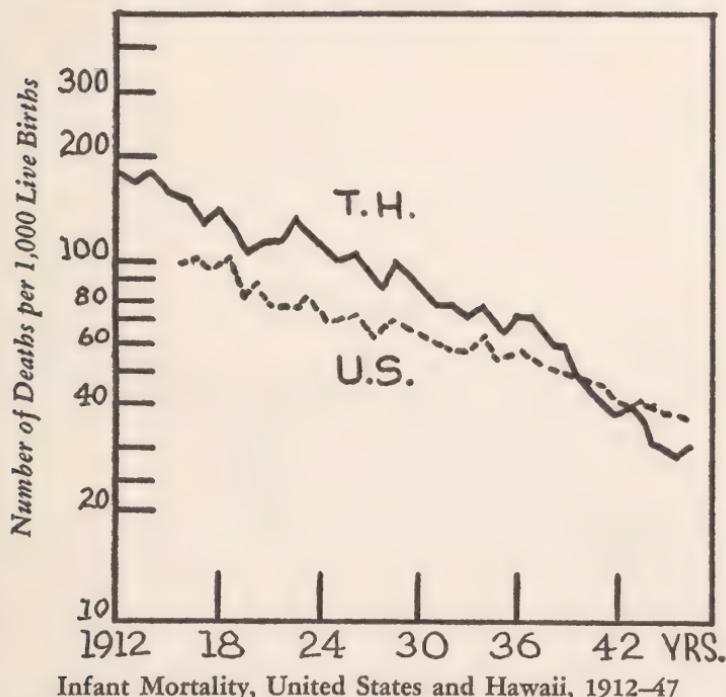
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<sup>1</sup>Only recommendations for immediate action were specified here.

## MATERNAL AND CHILD HEALTH

The importance of maternal and child health in the overall health picture in the Hawaiian Islands is underscored by recent mortality data. A larger percentage of persons die in their first year of life than at any other age below seventy, and the infant death rate is approximately twenty-five times as great as that for persons in their 'teens.<sup>1</sup> Three of every 100 live births in 1947 ended in the infant's death within one year. There were 1.2 maternal deaths per 1,000 live births. These rates are notoriously high for some groups: among the Hawaiians, for example, there were 62 infant deaths and almost nine maternal deaths per 1,000 live births in 1947.<sup>2</sup> Local trends have closely followed national trends in recent years.

There has been considerable improvement in maternal and child health in the Territory during the past few decades. There were more than 100 infant and five maternal deaths per 1,000 live births during the fiscal year of 1925. In 1935, the rates had fallen to 65 and 4.76, respectively. In 1945, only 30 infants and 1.5 mothers died per 1,000 live births.<sup>3</sup> During the same twenty-year



Infant Mortality, United States and Hawaii, 1912-47

Source: *Annual Report of the Board of Health, T. H., 1947.*

<sup>1</sup>National data for 1944 from *Vital Statistics of the United States, 1944, Part I*, p. xxi.

<sup>2</sup>*Annual Report of the Board of Health, Territory of Hawaii, for the Fiscal Year Ending June 30, 1947*, pp. 49 and 52.

<sup>3</sup>*Annual Report of the Board of Health, Territory of Hawaii, 1945*, pp. 109 and 113.

period, the mainland witnessed a decline in infant mortality from 71 to less than 40 per 1,000 live births, and a reduction of the maternal mortality rate from 6.5 to 2.<sup>31</sup>.

Many problems nevertheless remain. In spite of the encouraging reduction in rates noted above, absolute incidence is still high. There are imperfections in territorial legislation relating to this field. Personnel and facilities are frequently inadequate. Educational, preventive and therapeutic programs must be initiated or enlarged.

In order to make a practical assault on these problems, nine separate subcommittees of the Committee on Maternal and Child Health submitted recommendations. Aspects of the field covered included the following: maternal health conferences and prenatal and postpartum care; parents' classes, prematurity, midwifery, child health conferences and supervision, health care of dependent children, health aspects of adoption, children handicapped by heart disease, and women in industry.

Basic data on which the recommendations were based are given in the original study, *Maternal and Child Health Services, Territory of Hawaii*, published in January 1948.

## MATERNAL HEALTH CONFERENCES AND PRENATAL AND POSTPARTUM CARE

### Recommendations for Immediate Action

1. A study of the amount, caliber and effects of prenatal and postpartum care received by all pregnant women should be made jointly by the Bureau of Maternal and Child Health and the Medical Society.<sup>2</sup>
2. Maternal health conferences should be established in each hospital which operates a maternity service.

### Long-Range Objectives

3. The educational program on prenatal care should be expanded, especially in the high schools.
4. Prenatal and postpartum care and guidance in line with standards of the United States Children's Bureau should be made available to all mothers regardless of economic level.

## PARENTS' CLASSES

### Recommendations for Immediate Action

5. The Public Health Nursing staff of the Department of Health should be increased to permit more time to be devoted to the preparation, conduct and associated services of such classes.
6. The medical profession should consider the importance of parents' classes and establishment of a policy of referral of patients.
7. Classes should be scheduled at times when more fathers can attend.
8. Qualified groups and organizations should cooperate in preparing the content material of classes.

<sup>1</sup>*Vital Statistics of the United States, 1944*, p. xxv, and *Statistical Abstract of the United States, 1946*, p. 70. For birth- and death-registration states, 1925 and 1944.

<sup>2</sup>Such a study is now nearing completion.

9. Classes should be established in conjunction with organized adult education channels (University of Hawaii and Department of Public Instruction).

10. Consideration should be given to the possibility of including in the content of the classes information on birth spacing.

### Long-Range Objective

11. The program should be expanded to include classes for individuals of all economic groups.

### PREMATURITY<sup>1</sup>

12. Larger hospitals should maintain separate prematurity nurseries.

13. Nursery facilities in all hospitals should be improved.

14. A statistical survey should be made relative to:

a) Comparison of infant deaths with birth factors to determine relationships that do not appear in gross mortality statistics.

b) Analysis of birth weights of all infants.

c) Relationship of prematurity to various factors, such as race, illegitimacy, prenatal supervision, economic level and obstetrical procedures.

d) Follow-up study of premature infants for after-effects.

15. Special programs of the Territorial Department of Health should be continued.

16. The present Bureau of Maternal and Child Health program for training of midwives should be intensified.<sup>2</sup>

17. Portable incubators should be made readily available by the Department of Health to all rural parts of the island.

18. Private physicians, hospitals and the Department of Health should educate the public regarding the value of hospital delivery.

19. A maximum ratio should be established of 1 nurse on duty at all times, to 8 full-term infants and 1 nurse to 4 premature infants.

20. Nursery staffs should receive special training in the care of premature infants.

21. Routines and policies should be well established by the medical staff of each hospital.

22. Physicians and hospitals should refer cases for public health nursing service; and the staff of the Bureau of Public Health Nursing should be enlarged.

23. Hospital social service departments should be expanded.

24. The position of prematurity in relation to the determination of medical indigency should be clarified.

### MIDWIFERY

#### Recommendation for Immediate Action

25. The staff of the Bureau of Public Health Nursing should be increased to permit more time to be given to midwife supervision.

<sup>1</sup>Only recommendations for immediate action were specified by the committee.

<sup>2</sup>Recommendation presently in effect.

### **Long-Range Objectives**

26. Full and adequate medical supervision for all maternity patients should be provided.
27. The degree of independent management which occurs under the present program of midwifery should be discontinued.<sup>1</sup>

### **CHILD HEALTH CONFERENCES AND SUPERVISION**

#### **Recommendation for Immediate Action**

28. There should be established experimental or demonstration child health conferences for special purposes such as for diagnostic consultation or for education in mental hygiene.

#### **Long-Range Objective**

29. Adequate health supervision and guidance should be made available to all children.

### **HEALTH CARE OF DEPENDENT CHILDREN<sup>2</sup>**

30. Bedside care should be made readily available to all institutionalized children by each institution or by a coordinated plan through public or other funds.

31. Foster parents should be recompensed by the Department of Public Welfare for the cost of home medical care of dependent children by the family physician of the foster parents.

32. Careful study should be made jointly by the Juvenile Court, Police Department, public health agencies, social agencies and medical society of the medicolegal and social implications of local practices in connection with examination of dependent children, especially of adolescent and pre-adolescent girls.

### **HEALTH ASPECTS OF ADOPTION**

#### **Recommendations for Immediate Action**

33. A coordinated educational program should be instituted by agencies concerned to inform the public regarding adoption procedures.<sup>1</sup>

34. A greater degree of uniformity of procedures and practices should be developed in relation to health examinations and medical follow-up of both the adoptive children and adoptive parents among the social work agencies responsible for adoption. To this end, the child placement agencies should set up a joint medical advisory committee under the child welfare committee of the Council of Social Agencies.

#### **Long-Range Objectives**

35. Revised legislation to make social and medical investigation mandatory in all adoption procedures should be enacted.

36. Adequate social service resources should be developed in the Department of Public Welfare to make investigations.

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<sup>1</sup>Recommendation presently in effect.

<sup>2</sup>Only recommendations for immediate action were specified by the committee.

## CHILDREN HANDICAPPED BY HEART DISEASE

### Recommendations for Immediate Action

37. A school survey should be made to determine the prevalence of rheumatic fever in the Islands.

38. An educational program should be directed at lay and professional persons, with special emphasis on the high incidence of rheumatic fever and the need for funds to combat it.

39. A territorial chapter of the American Heart Association should be organized to coordinate efforts of interested physicians and laymen.

### Long-Range Objectives

40. Children's Hospital should open its own outpatient department, preferably on its present grounds.

41. Support of the rheumatic fever unit should eventually be shifted to the public, funds to be raised by popular subscription.

42. A rheumatic fever program should be started jointly by hospitals, social agencies, physicians and schools.<sup>1</sup>

43. A foster home service should be established for children convalescing from rheumatic fever.

44. Consideration should be given by the proposed territorial chapter of the American Heart Association to the raising of a fund to pay for the medical care (and possible travel expenses) of indigent children with congenital heart disease.

## WOMEN IN INDUSTRY

### Recommendations for Immediate Action

45. A study should be made of legislation in other parts of the country relating to women in employment and the advisability of developing such legislation to meet the needs of the Territory. The study should be initiated by the Territorial Department of Health and made by a committee composed of representatives from the medical profession, public health, labor, management, and the Territorial Labor Commission.

46. Employers' associations, even in the absence of legislation and beyond legislated requirements, should attempt to educate employers to the advantages resulting from high standards of working conditions of female employees, and to the development of attitudes toward the pregnant working woman based on the following principles:

- a) Punitive policies and practices toward the working pregnant woman result in her keeping her pregnancy secret as long as possible, thus increasing any hazards which may exist.
- b) The likelihood of interruption of pregnancy is greatest during the first three months of pregnancy when the woman can usually keep her condition from being detected.

<sup>1</sup>Recommendation presently in effect.

c) Encouraging the working pregnant woman to disclose her pregnancy early results in more adequate medical care, greater exercise of safety precautions, more productive use of her abilities, and greater protection to the employer.

47. By joint efforts of the medical society, management, labor, and the Department of Health, there should be established in connection with working pregnant women a program of:

- a) Job analysis in physical terms.
- b) Reporting of such analysis to physicians.
- c) Interpretation of physicians' findings to employers and personnel managers.
- d) Modification of conditions of employment to meet the recommendations of the physicians.

#### **Long-Range Objective**

48. A five-year survey should be made with emphasis on the advantages of the program to the employer as well as to the employee.

## HEALTH SERVICES AND STATISTICS

The final volume of the Postwar Planning series was devoted to studies of four very important health services: nursing, occupational therapy, physiotherapy, and the keeping of health statistics.

In three of these services—nursing, occupational therapy and physiotherapy—the central problem is one of obtaining trained personnel. Manpower shortages linger on from wartime dislocations, training facilities are frequently lacking in the Territory, and official or private agencies are unable to make adequate provision for staffing.

Even when personnel are adequate, a problem remains. Professional workers in allied fields are often hostile to newer developments in health and medical services. Lay persons, through ignorance or bias, are unwilling to make the optimum use of these services. Sometimes they would like to, but are thwarted by economic considerations. Such difficulties—not uncommon ones in the fields under consideration—are partly resolved by an intensive program of health education.

Health statistics presents other problems. First, existing facilities and data must be utilized as fully as possible. Second, future surveys and censuses must be much more extensive than they are at present. The Bureau of the Census, the Bureau of Labor Statistics and a number of other official and private agencies charged with the collection and analysis of data, either on a local or a national scale, must be convinced of the necessity of full coverage of Honolulu and the Territory. This coverage should take in not only births, deaths and incidence of illness, but other information intimately related to health—migration, housing, costs of living, income. Since much statistical material is collected by states (and territories omitted), attainment of this goal must ultimately wait upon statehood for Hawaii.

The four subjects considered in this volume, either as specialized forms of treatment or (in the case of statistics) as powerful, overall tools of attack, are unquestionably integral parts of any comprehensive community health program. Thus, committees were assigned to each, to make recommendations designed to minimize the problems noted above. Both their recommendations and the qualitative and quantitative background on which they were based are treated in the original report, *Health Services and Statistics, Territory of Hawaii*, published in January 1948.

### NURSING

#### Recommendations for Immediate Action

1. More discriminating prerequisites should be adopted, to assure the highest type of student in local schools of nursing.
2. Needed facilities and affiliations should be instituted in schools of nursing where they are at present lacking.

3. The Nurses' Association should keep records of the number of members engaged in each specific activity, and maintain a perpetual inventory, to supplement data of the Board for the Licensing of Nurses.

4. Revenue should be augmented by increase in fees and territorial funds so as to employ personnel for extensive record keeping. A perpetual inventory should be maintained of all significant information.

5. The Nurses' Association of the Territory and the Territorial League for Nursing Education should make the necessary studies and assume responsibility for active leadership in attacking the problems confronting private duty nurses, as well as others: development of standards, improvement of professional training and graduate study facilities, and improvement of working conditions, wages and hours, in general.

6. A program of hourly private duty nursing should be considered.

7. Private duty nursing should be included in Hawaii Medical Service Association hospital coverage.

8. Wages and hours of private duty nurses should be adjusted to levels prevailing in other occupations of similar skill levels.

9. Public health staff nurses should be increased to meet a ratio of 1:5000, nurses to population.

10. Financial assistance should be continued to promising public health staff members for advanced training on the mainland.

11. Inadequate buildings used by public health nurses outside of Honolulu should be replaced or repaired.

12. In the field of school nursing, special emphasis should be put on maintaining adequate nursing-to-pupil ratios in schools outside Oahu.

#### **Long-Range Objectives**

13. A central school of nursing should be instituted at the University of Hawaii.

14. Department of Health field practice facilities should be extended to nursing schools as they are ready for them and facilities become available.

15. More scholarships to student nurses should be offered.

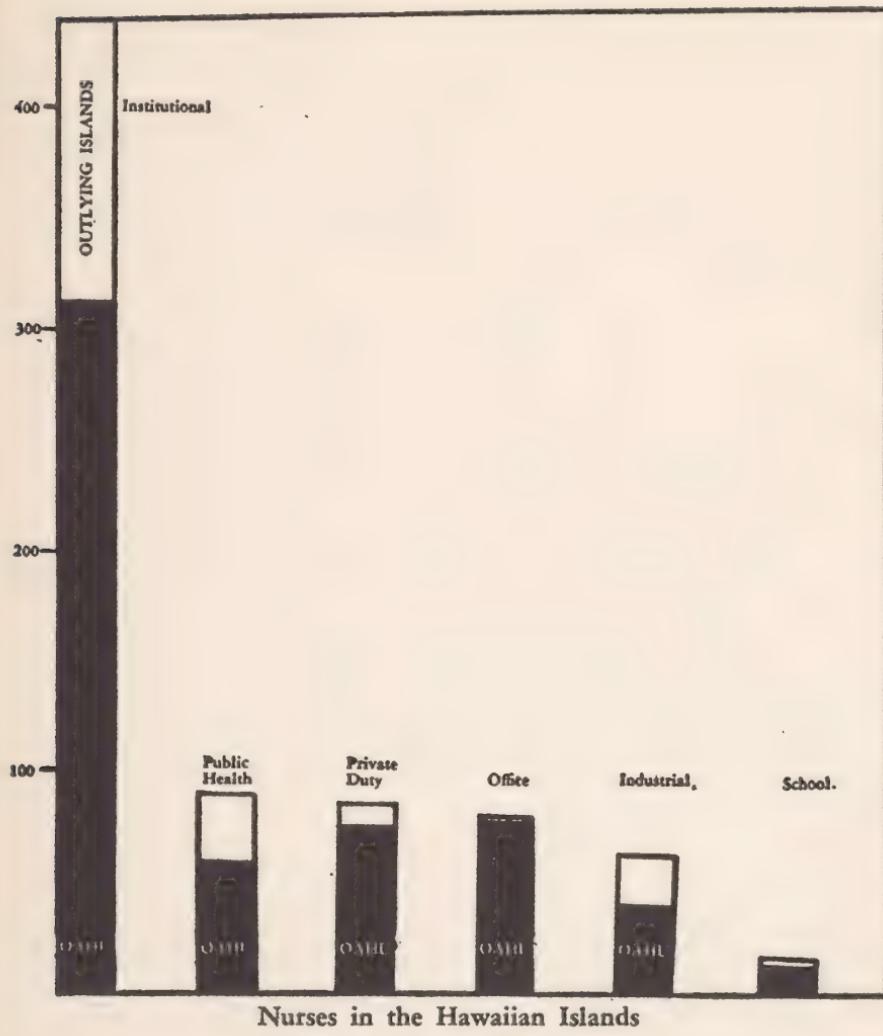
16. Job analysis of office nursing should be instituted by the Nurses' Association, Territory of Hawaii and the Medical Society.

17. The need for a bedside care program should be studied, and, if need is indicated, it should be developed by the Territorial Department of Health.

18. Public health staff nurse and supervisory personnel ratios of 1 nurse to 2500 population (assuming a bedside care program) and 1 supervisor to 10 staff nurses and students should be maintained.

19. Adequate consultant service in major fields should be maintained.

20. Offices and conference and clinic rooms for public health nurses should be constructed where necessary.



Source: Territorial Board for the Licensing of Nurses.

### OCCUPATIONAL THERAPY Recommendations for Immediate Action

1. Adequate legislation regulating the practice of occupational therapy should be enacted.
2. A well-planned educational program for both lay and professional groups should be undertaken by the Occupational Therapy Association of Hawaii in order to interpret the need and value of occupational therapy in the treatment of ill and handicapped persons.
3. Territorial Civil Service ratings should be changed from "SP" (semi-professional) to "P" (professional), in conformity with mainland standards.

## Long-Range Objectives

4. If a medical school is established at the University of Hawaii, a school of occupational therapy should be established in connection with it; otherwise, the University of Hawaii should consider the possibility of establishing specific courses in occupational therapy as part of its present curriculum.
5. The education of island girls as occupational therapists should be encouraged by increasing the amount of the scholarship loan fund and by making it available to more candidates.

## PHYSIOTHERAPY

### Recommendations for Immediate Action

1. No plans should be considered for a training program for physiotherapists in the Territory until such time as a medical school is established.
2. Outpatient clinics, which hitherto have shared hospital physiotherapy facilities with other departments, should be given their own physiotherapy staffs.
3. In order to provide more adequate physiotherapy services on the other islands, hospitals and related institutions should be encouraged to develop and utilize this service.
4. In order to interpret physiotherapy to physicians, other professional groups and the general public, a "Physiotherapy Week" should be sponsored by specialists in this field in cooperation with the Oahu Health Council. Special efforts should be made to impress on laymen and professional persons the role of physiotherapy in treatment services and by physicians in private practice, and the need for trained physical therapists. Lay persons should be warned against quacks and untrained persons.
5. Consideration should be given to the greater promotion and utilization of physiotherapy in medical insurance and industrial health programs.

## Long-Range Objectives

6. The board of trustees and others concerned in the operation of the new convalescent home should consider the need for an attending physiotherapist and adequate facilities to provide service of high standard.
7. All hospitals and institutions should consider and study the need for at least one physiotherapist on each of the other islands in order that needs of physicians in utilizing physiotherapy in the treatment of patients may be met.

## HEALTH STATISTICS<sup>1</sup>

1. An expanded Bureau of Health Statistics should be established in the Department of Health as promptly as funds and qualified personnel can be obtained. This agency should incorporate the facilities for compiling, analyzing and interpreting vital statistics already provided by the Bureau of Vital Statistics; but it should, in addition, set up machinery for performing these same functions

<sup>1</sup>Only recommendations for immediate action were made by the committee.

with respect to morbidity statistics and other biometric information necessary in planning for better health. This bureau should properly be charged with responsibility of securing the information needed for accurate intercensal estimates of population by race, sex, broad age groups, and larger geographic units within the Territory. The Bureau of Health Statistics should endeavor to develop uniform methods of reporting the desired statistics—uniform as between the agencies of the Territory and at the same time, consistent with nationally accepted methods of reporting.

2. Since not all the public and private agencies concerned with the use of vital and morbidity statistics, population and other biometric data are directly connected with the Department of Health, there might well be established an advisory committee representing all health agencies in the community to assist in integrating and coordinating their various interests.

3. Immediate steps should be taken to secure detailed information from the responsible military agencies as to the movement in and out of the Territory of civilian population during the war period. It is important that this vital information be garnered before the records are lost. These data should be broken down by race, citizenship, sex, and broad age classes. It may be necessary to provide special funds to the Bureau of Vital Statistics in order to fill this serious gap in the funded knowledge of Hawaii's population.

4. Within the Bureau of Health Statistics facilities should be established for funding routine information on the movements of population in and out of the Islands. The cooperative arrangement which existed prior to the war with the United States Immigration Service for making such information available should perhaps be expanded to include the gross figures of inter-island travel. Data on intra-territorial movement should doubtless be obtained so as to increase the accuracy of intercensal estimates of population by islands.

5. A request should be forwarded immediately to the Census Bureau, Washington, D. C., for the complete tabulation of the 1940 census of population. Even though much of the information is already out of date, the tabulations should be obtained both as the best information now available and as a basis of comparison with previous and subsequent censuses.

6. Immediate action should be undertaken through the Hawaiian Delegate to Congress and the Department of the Interior to include Hawaii in all census reports from Washington giving information by states and cities.

7. Local agencies should take greater cognizance of the information available by census tracts, and make increased use of these areas in collecting and analyzing data (*e.g.*, delinquency or disease incidence) for which they are responsible.

8. Efforts of the Chamber of Commerce's special committee on census needs and similar groups to assure an adequate Federal census in 1950 (especially in regard to census tract data) should be expanded and encouraged.<sup>1</sup>

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<sup>1</sup>This group met with a Census Bureau representative in April, 1948, better to plan for the forthcoming decennial census.

## SELECTED BIBLIOGRAPHY

### Volumes, Pamphlets and Special Reports

Samuel D. Allison and June Johnson, *V. D. Manual for Teachers* (New York, 1946)

Bruce H. Douglas, *Tuberculosis in the Territory of Hawaii* (Honolulu, 1938)

Franklin G. Ebaugh, *Mental Health in Hawaii* (Honolulu, 1937)

Ira V. Hiscock, *Health and Welfare in Honolulu, Hawaii* (New Haven, 1929)

\_\_\_\_\_, *Public Health in Hawaii* (Honolulu, 1935)

Richard K. C. Lee, M.D., *A Study of the Venereal Disease Problem in the Territory of Hawaii* (Yale University, 1938)

Postwar Planning Committees on Health, *Healthful Housing for the Territory of Hawaii* (Honolulu, February 1946)

\_\_\_\_\_, *Public Health Administration and Organization for the Territorial Board of Health*, T. H. (Honolulu, May 1946)

\_\_\_\_\_, *Hawaii's Sanitation Problems* (Honolulu, December 1946)

\_\_\_\_\_, *School Health Programs*, T. H. (Honolulu, December 1946)

\_\_\_\_\_, *Communicable Disease Control*, T. H. (Honolulu, September 1947)

\_\_\_\_\_, *Planning for Health through Community Health Education, Social Hygiene, Mental Hygiene, Nutrition*, T. H. (Honolulu, December 1947)

\_\_\_\_\_, *Maternal and Child Health Services*, T. H. (Honolulu, January 1948)

\_\_\_\_\_, *Health Services and Statistics*, T. H. (Honolulu, January 1948)

Public Health Committee of the Chamber of Commerce of Honolulu, *Public Medical Care in Hawaii* (Honolulu, June 1947)

### Periodicals and Annual Reports

*Annual Report of the Board of Health, Territory of Hawaii* (printed each year, 1941-1947; mimeographed annually, 1934-1940)

*Better Mental Health for Hawaii* (quarterly bulletin of the Mental Hygiene Society of the Territory of Hawaii)

*Golden Anniversary Report, Palama Settlement, Honolulu, Hawaii* (1946)

*The Hawaii Health Messenger* (monthly publication of the Board of Health)

*Hawaii Medical Journal* (bimonthly publication of the Hawaii Medical Society)

*Oahu Health Council Bulletin* (monthly)

*Plantation Health* (bimonthly publication of the Hawaiian Sugar Planters' Association)

*Vital Statistics of the United States, Part I* (annual, now issued by the Federal Security Agency)

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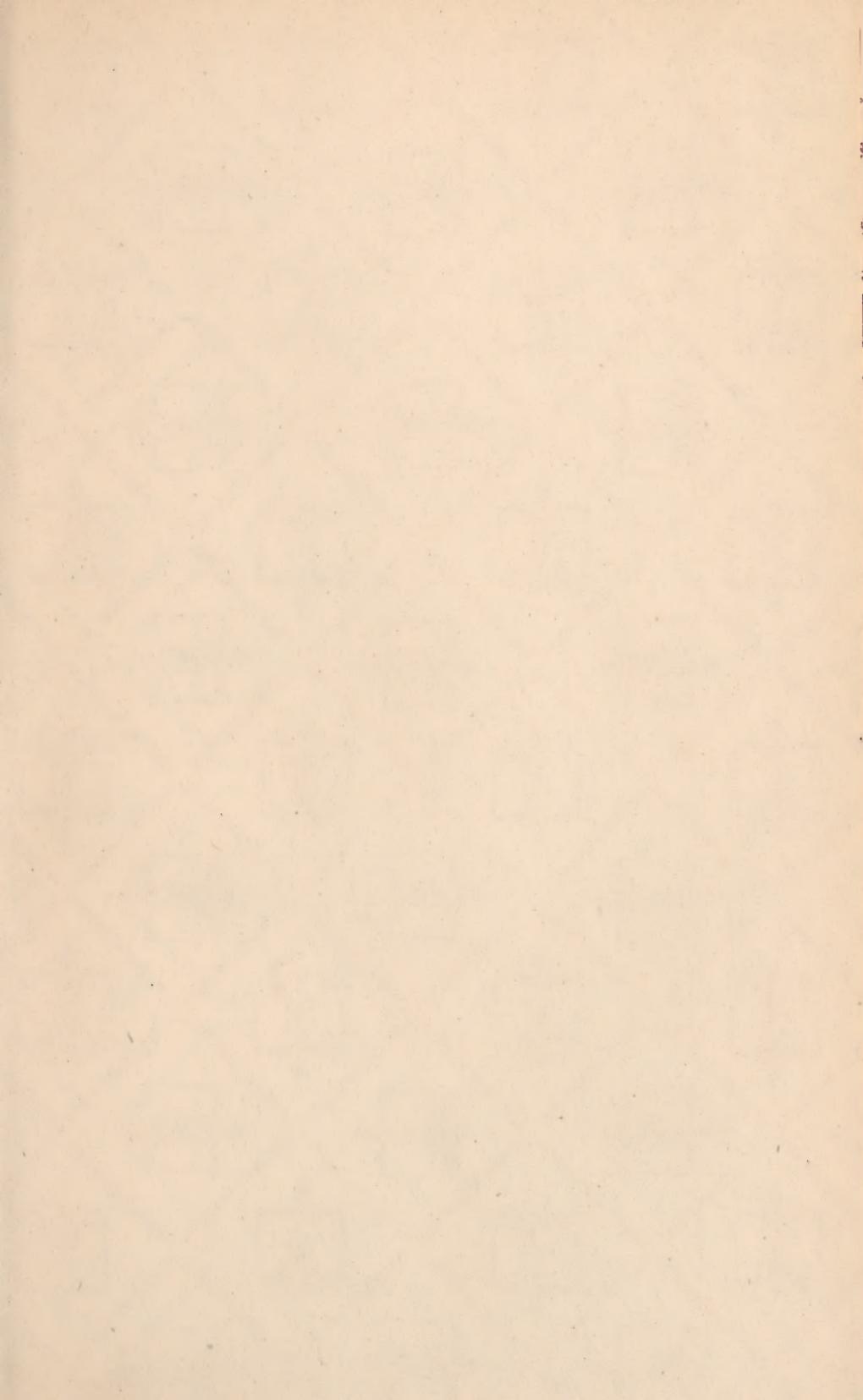
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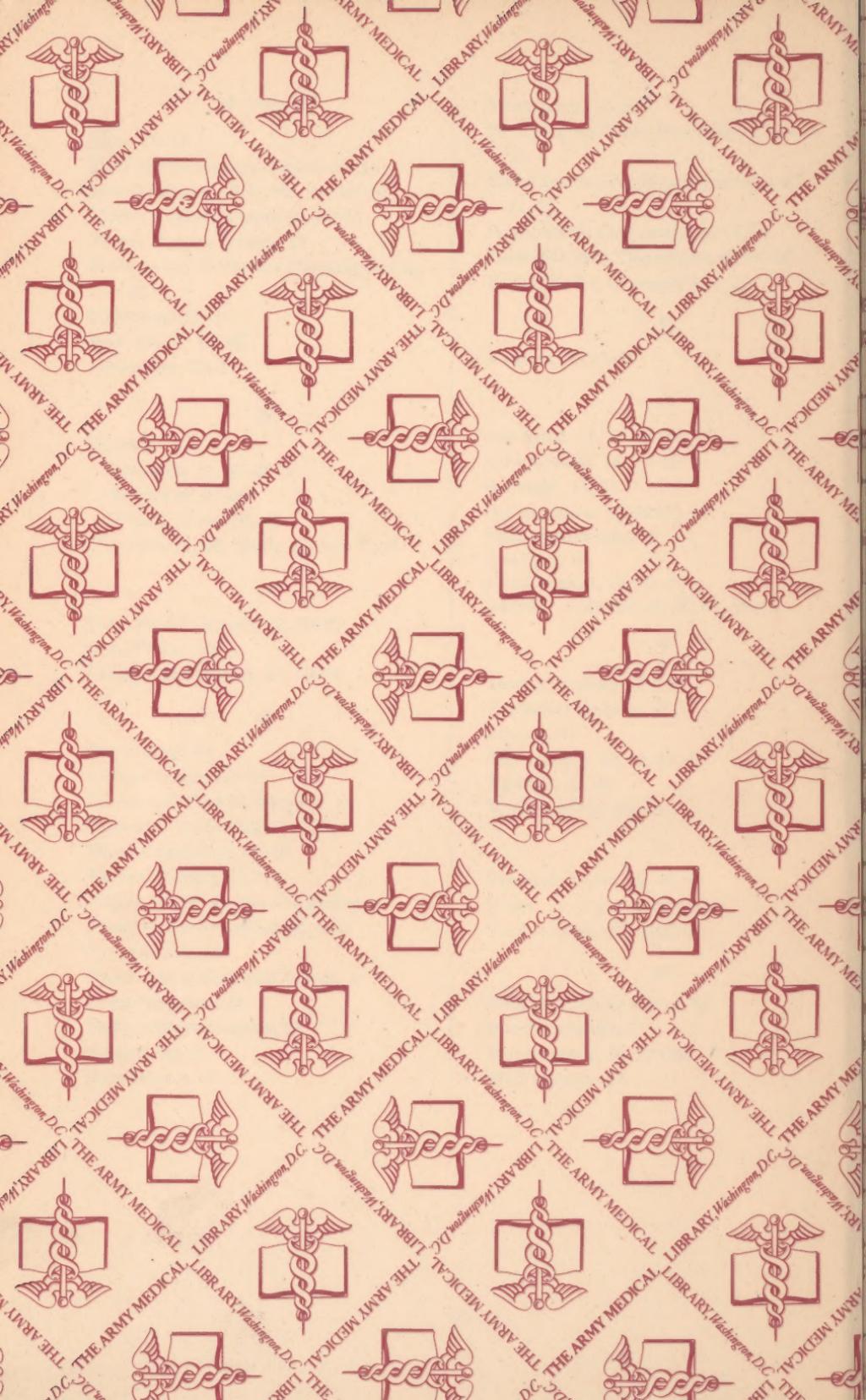
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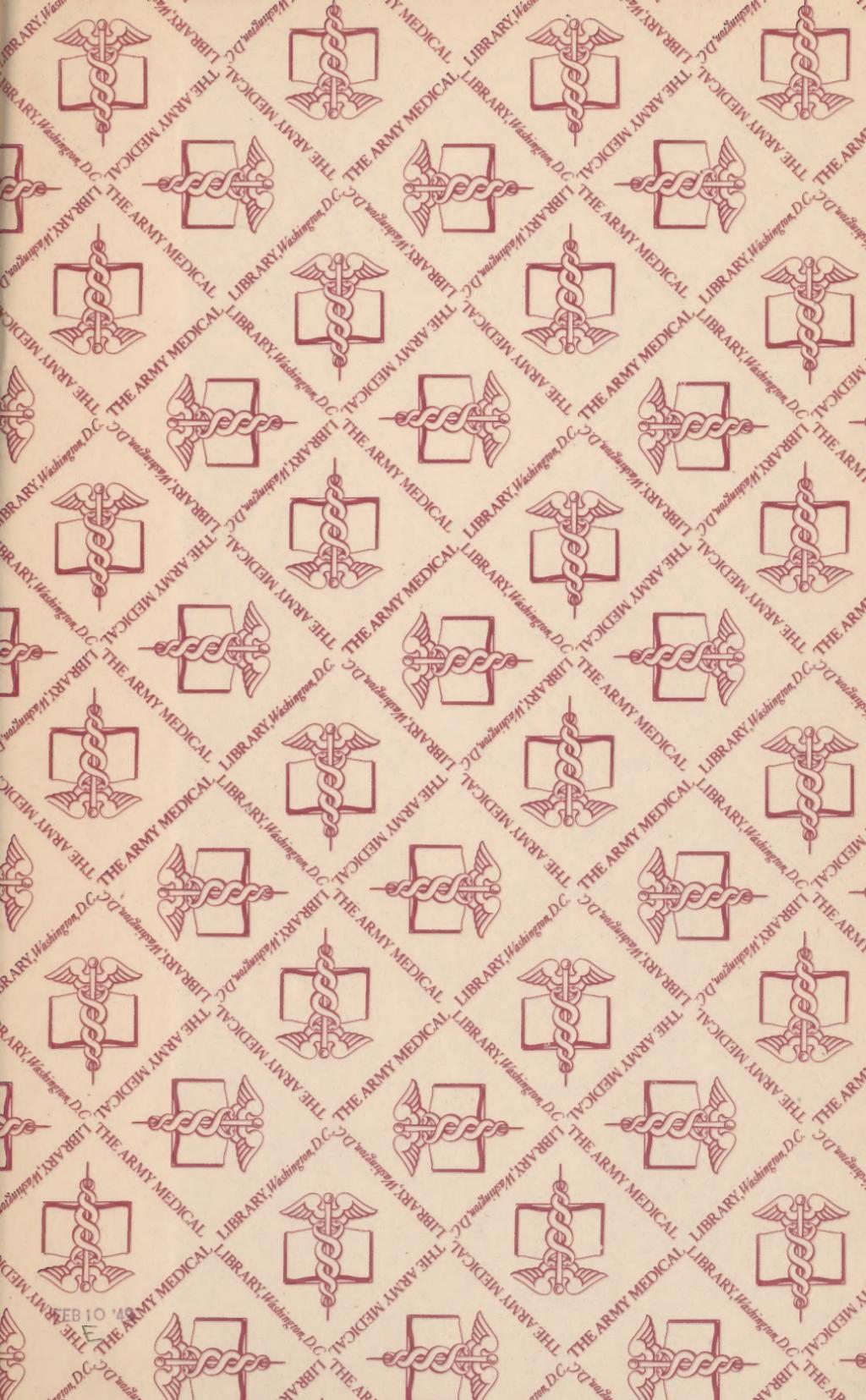
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